400 Seventh Street, S.W.
Washington, D.C. 20590

U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

*** *** ***

U.S. Department of Transportation
National Highway Traffic Safety Administration

CASE SUMMARY

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

PSU 45 CASE NO. 121F TYPE OF ACCIDENT Car/Car/Car - Rear to Front

A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES

(Provide a summary of the accident sequence as well as any particular event of the accident that is noteworthy. Injury mechanism and vehicle crashworthiness is the focus, not driver culpability. **Do not include any personal identifiers.** Use reverse side if needed.)

Vehicle #3 was stopped, preparing to turn left across two lanes of traffic on a four lane highway. Vehicle #2 was stopped behind Vehicle #3. Vehicle #1 came up behind Vehicle #2 but couldn't stop and contacted Vehicle #2 in the rear. This forced Vehicle #2 to contact the rear of Vehicle #3.

B. VEHICLE PROFILE(S)

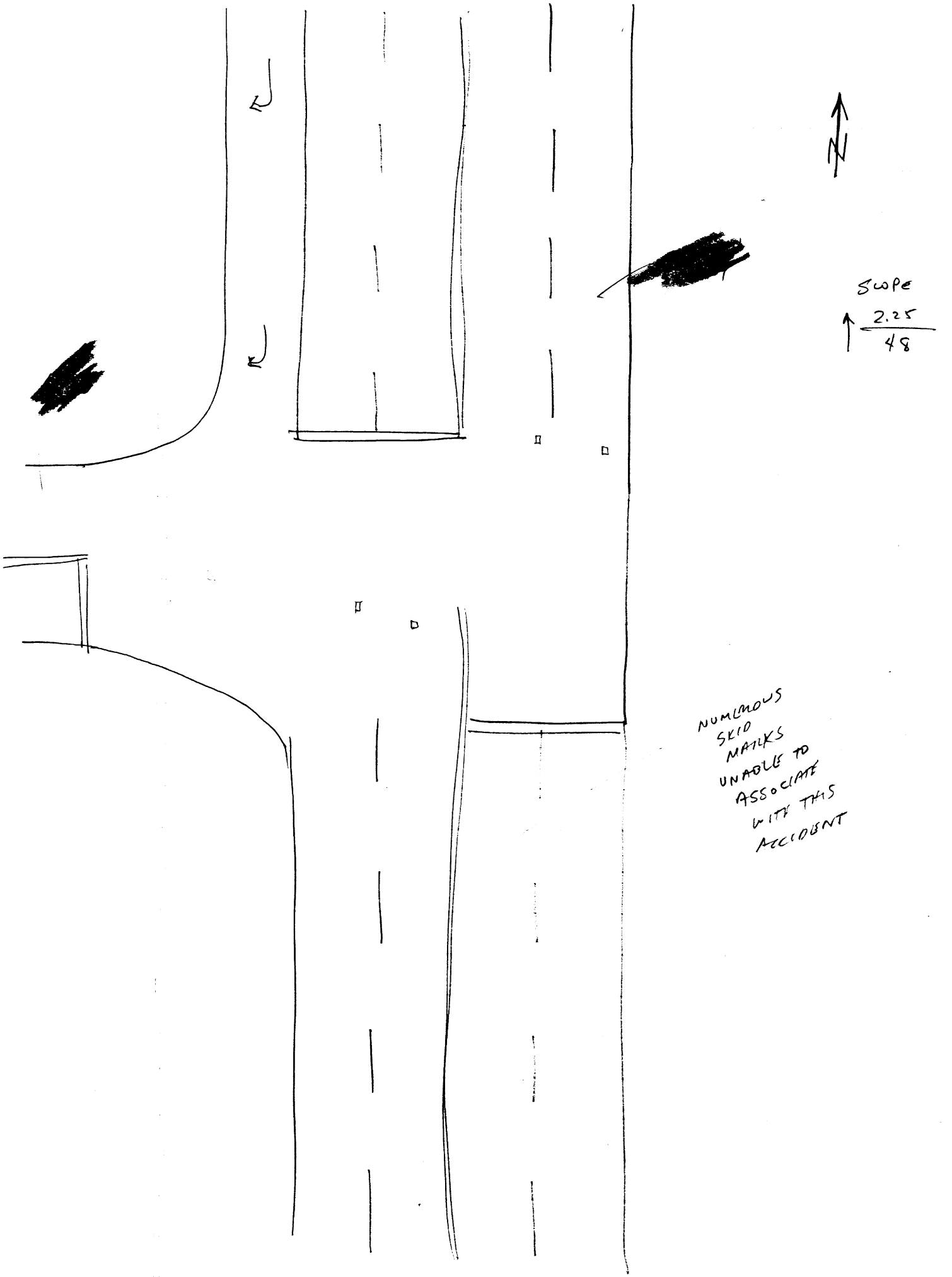
Vehicle No.	Class of Vehicle	Year/Make/Model	Most Severe Damage		Component Failure
			Damage Plane	Severity Description	
1	Full Size	1971 Ford Torino Wagon	Front	Moderate	None
2	Subcompact	1987 Ford Tempo	Back	Severe	None
3	Intermediate	1985 Lincoln Mark VII	Back	Moderate	None

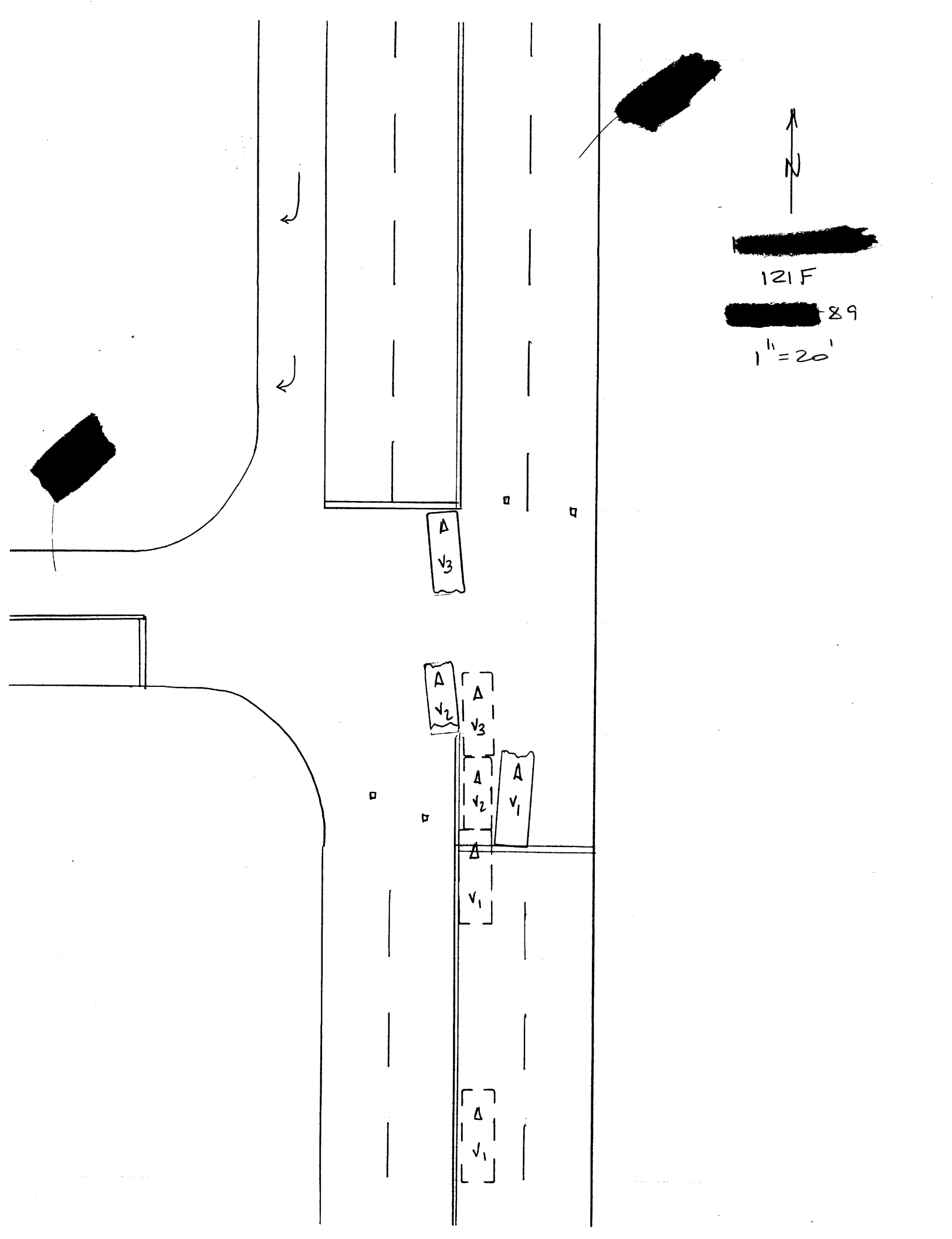
C. PERSON PROFILE(S)

Vehicle No.	Person Role	Seat Position	Restraint Use	Most Severe Injury			
				Body Region	Lesion	AIS	Injury Source
1	Driver	Front Left	None	Face	Contusion	1	Windshield
1	Passenger	Front Right	None	Face	Contusion	1	Windshield
2	Driver	Front Left	None	Face Unknown	Laceration	1	windshield
3	Driver	Front Left	Lap & Shoulder		Not Injured		
3	Passenger	Front Right	Lap & Shoulder		Not Injured		
3	Passenger	Back Right	None		Not Injured		

DO NOT SANITIZE THIS FORM

HS Form 434A
1/89


N
SLOPE
2.25
48
NUMEROUS
SKID
MARKS
UNABLE TO
ASSOCIATE
WITH THIS
ACCIDENT


N
121 F
89
1" = 20'
Δ
v3
Δ
v2
Δ
v3
Δ
v2
Δ
v1
Δ
v1
Δ
v1

U.S. Department of Transportation
National Highway Traffic Safety Administration

ACCIDENT COLLISION MEASUREMENT TABLE

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

Primary Sampling Unit Number 45 Case Number–Stratum 121F

ACCIDENT COLLISION DIAGRAM

LEVEL I
PHYSICAL EVIDENCE ABSENT

To be accomplished when there is no physical evidence present at the scene:

*approximate vehicle orientation at impact and final rest

*applicable road/roadway delineation (e.g., curbs/edge lines, lane markings, median markings, pavement markings, etc.)

*applicable traffic controls (e.g., speed limit)

*north arrow placed on diagram

*sketch required

LEVEL II
PHYSICAL EVIDENCE PRESENT

In addition to the Level I tasks noted above, the following must be accomplished when physical evidence is present:

*document reference point and reference line relative to physical features present at the scene

*scaled documentation of all accident induced physical evidence

*scaled documentation of all roadside objects contacted

*roadway surface type and condition of applicable roadways

*grade measurements for all applicable roadways

*scaled representations of the vehicle(s) at pre-impact, impact, and final rest based upon either:

a) physical evidence, or

b) reconstructed accident dynamics

LEVEL II (Cont'd)

CRASH DATA

	VEH. #1	VEH. #2	VEH. #3
Heading Angle			
Surface Type			
Surface Condition			
Grade Measurement (v/h)			

Reference Point: _____ Reference Line: _____

Item	Distance and Direction from Reference Point	Distance and Direction from Reference Line
NO PHYSICAL EVIDENCE		

HS Form 431A
1/88

Item	Distance and Direction from Reference Point	Distance and Direction from Reference Line

U.S. Department of Transportation
National Highway Traffic Safety Administration

EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 45	3. Vehicle Number: 01
2. Case Number – Stratum: 121F	

VEHICLE IDENTIFICATION

VIN: F1A42H[redacted] Model Year: 1971

Vehicle Make (specify): FORD

Vehicle Model (specify): TORINO WAGON

LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	BEGINS 11.3" FROM L.F. CORNER	ENTIRE FRONTAL PLANE

CRUSH PROFILE

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush.

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of C-Measurements	Direct Damage Width (CDC)	Direct Damage Max Crush	Field L	C_1	C_2	C_3	C_4	C_5	C_6	±D
1	FRONT BUMPER	60.0		70.8	3.3	8.6	11.3	11.7	11.6	12.5	0
1					0	2.5	1.5	1.5	2.5	0	0
1			19.5		3.3	6.1	9.8	10.2	9.1	12.5	0
	APPROXIMATE DAMAGE				4.0	11.0	20.0	23.0	18.0	21.0	
					0	2.5	1.5	1.5	2.5	0	
			21.5		4.0	9.5	18.5	21.5	15.5	21.0	
	MEASUREMENTS ARE NOT ACCURATE, DRIVER STATED THAT HE PULLED FRONT BUMPER & GRILL OUT ABOUT 1 FOOT IN ORDER TO PREPARE VEHICLE FOR ENGINE REMOVAL.										

HS Form 435A
1/89

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE

	a. Rotation physically restricted	b. Tire deflated
RF	1	2
LF	2	2
RR	2	2
LR	2	2

(1) Yes (2) No (8) NA (9) Unk.

TYPE OF TRANSMISSION

☐ Manual ☒ Automatic

ORIGINAL SPECIFICATIONS

Wheelbase	114.0
Overall Length	209.0
Maximum Width	75.4
Curb Weight	3380
Average Track	60.0
Front Overhang	40.0
Rear Overhang	55.0
Engine Size: cyl./ displ.	6 CYL
Undeformed End Width	67.0

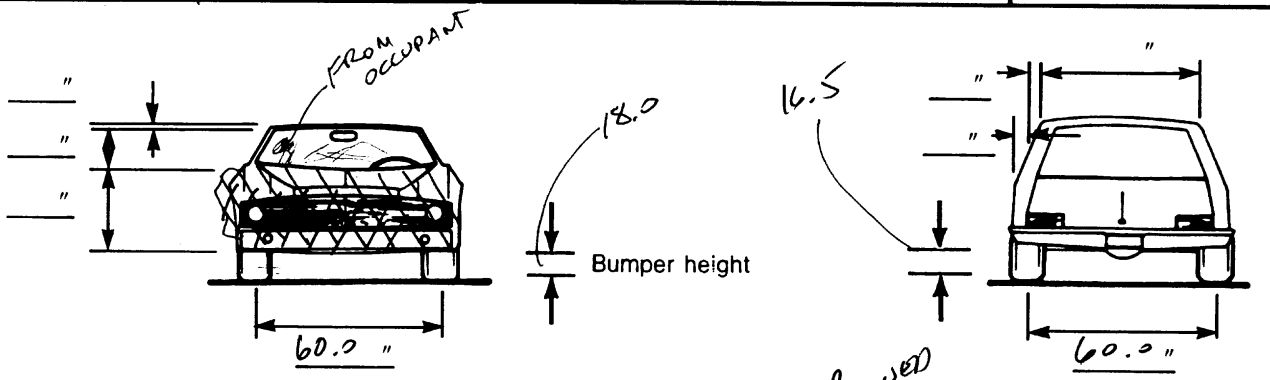
WHEEL STEER ANGLES
(For locked front wheels or displaced rear axles only)

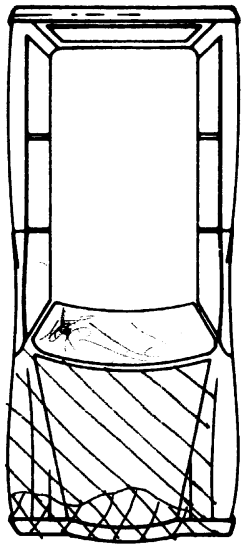
RF ± ___ ___ °
LF ± ___ ___ °
RR ± ___ ___ °
LR ± ___ ___ °
Within ±5 degrees

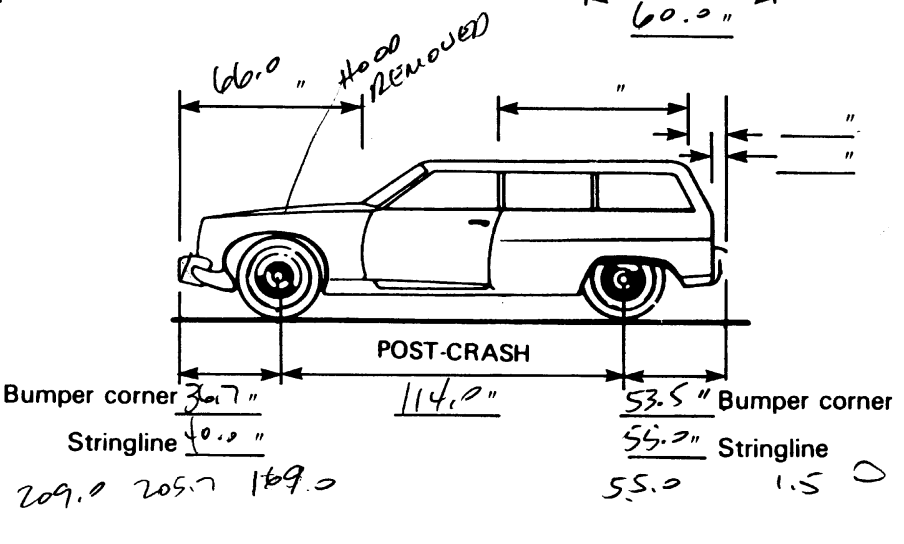
DRIVE WHEELS

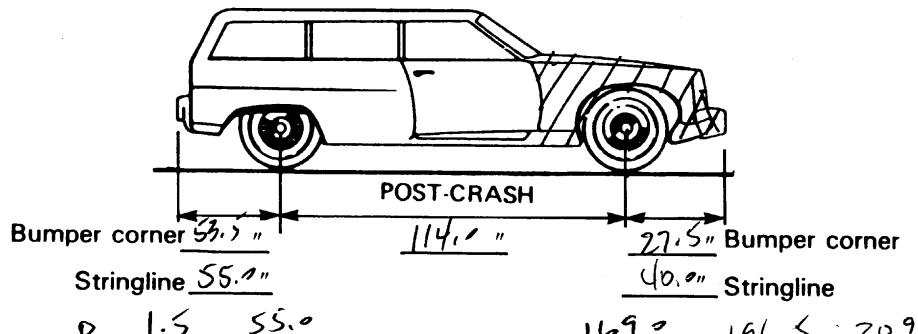
☐ FWD ☒ RWD ☐ 4WD

Approximate Cargo Weight 0









NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewall, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.
Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

01-30—Vehicle Number

Noncollision
- (31) Overturn—rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify): _____
- (35) Noncollision injury
- (38) Other noncollision (specify): _____
- (39) Noncollision—details unknown

Collision with Fixed Object
- (41) Tree (≤4 inches in diameter)
- (42) Tree (>4 inches in diameter)
- (43) Shrubbery or bush
- (44) Embankment
- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post
- (50) Pole or post (≤4 inches in diameter)
- (51) Pole or post (>4 but ≤12 inches in diameter)
- (52) Pole or post (>12 inches in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (specify): _____
- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or Culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): _____
- (69) Unknown fixed object

Collision With Nonfixed Object
- (71) Motor vehicle not in transport
- (72) Pedestrian
- (73) Cyclist or cycle
- (74) Other nonmotorist or conveyance (specify): _____
- (75) Vehicle occupant
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (88) Other nonfixed object (specify): _____
- (89) Unknown nonfixed object

- (98) Other event (specify): _____
- (99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
01	02	000	00	F	D	E	W	02

US Department of Transportation
National Highway Traffic Safety Administration

INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 45
2. Case Number–Stratum: 121F
3. Vehicle Number: 01

INTEGRITY

4. Passenger Compartment Integrity 00

(00) No integrity loss

Yes, Integrity Was Lost Through
(01) Windshield
(02) Door (side)
(03) Door/hatch (rear)
(04) Roof
(05) Roof glass
(06) Side window
(07) Rear window
(08) Roof and roof glass
(09) Windshield and door (side)
(10) Windshield and roof
(11) Side and rear window
(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate Or Hatch Opening

5. LF 1 6. RF 1 7. LR 1 8. RR 1 9. TG/H 0

(0) No door/gate/hatch
(1) Door/gate/hatch remained closed and operational
(2) Door/gate/hatch came open during collision
(3) Door/gate/hatch jammed shut
(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then Code 0.

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate, or Hatch Came Open During Collision
(1) Door operational (no damage)
(2) Latch/striker failure due to damage
(3) Hinge failure due to damage
(4) Door structure failure due to damage
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
(6) Latch/striker and hinge failure due to damage
(8) Other failure (specify):

(9) Unknown

GLAZING

Glazing Damage from Impact Forces

15. WS 2 16. LF 0 17. RF 0 18. LR 0 19. RR 0
20. BL 0 21. Roof 8 22. Other 8

(0) No glazing damage from impact forces
(2) Glazing in place and cracked from impact forces
(3) Glazing in place and holed from impact forces
(4) Glazing out-of-place (cracked or not) and not holed from impact forces
(5) Glazing out-of-place and holed from impact forces
(6) Glazing disintegrated from impact forces
(7) Glazing removed prior to accident
(8) No glazing
(9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS 2 24. LF 0 25. RF 0 26. LR 0 27. RR 0
28. BL 0 29. Roof 0 30. Other 0

(0) No occupant contact to glazing or no glazing
(1) Glazing contacted by occupant but no glazing damage
(2) Glazing in place and cracked by occupant contact
(3) Glazing in place and holed by occupant contact
(4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
(5) Glazing out-of-place by occupant contact and holed by occupant contact
(6) Glazing disintegrated by occupant contact
(9) Unknown if contacted by occupant

If No Glazing Damage ***And*** No Occupant Contact or No Glazing, Then Code IV 31 Through IV 46 As 0

Type of Window/Windshield Glazing

31. WS 1 32. LF 0 33. RF 0 34. LR 0 35. RR 0
36. BL 0 37. Roof 0 38. Other 0

(0) No glazing contact and no damage, or no glazing
(1) AS-1 – Laminated
(2) AS-2 – Tempered
(3) AS-3 – Tempered-tinted
(4) AS-14 – Glass/Plastic
(8) Other (specify):

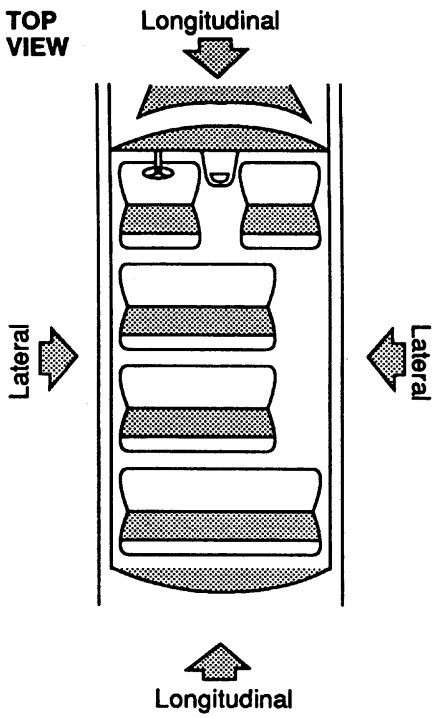
(9) Unknown

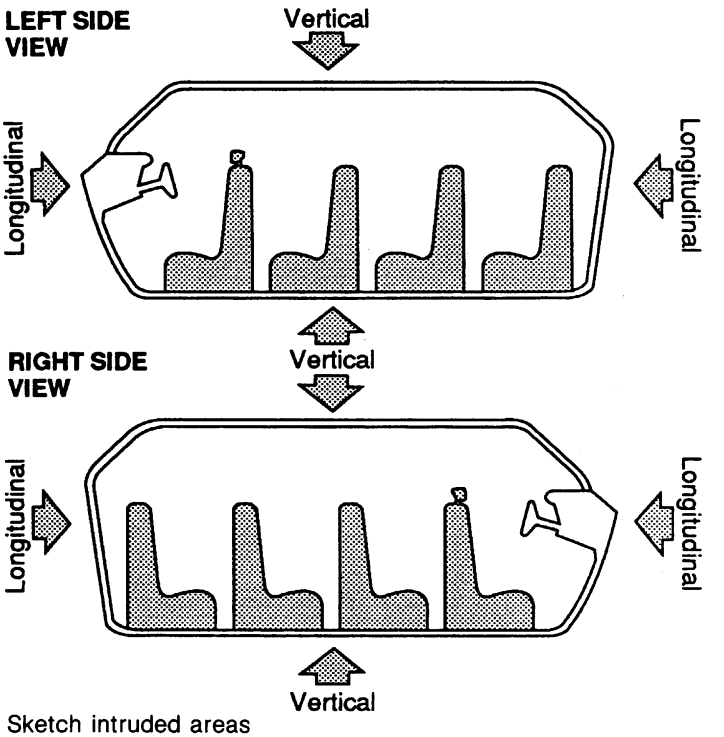
Window Precrash Glazing Status

39. WS 1 40. LF 0 41. RF 0 42. LR 0 43. RR 0
44. BL 0 45. Roof 0 46. Other 0

(0) No glazing contact and no damage, or no glazing
(1) Fixed
(2) Closed
(3) Partially opened
(4) Fully opened
(9) Unknown

INTRUSION WORK SHEET





Note: Sketch intruded areas

LOCATION OF INTRUSION	INTRUDED COMPONENT	COMPARISION VALUE	–	INTRUDED VALUE	=	INTRUSION	DOMINANT CRUSH DIRECTION
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		

Document no more than the 15 most severe intrusions

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV 47-IV 86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47.____	48.____	49.__	50.__
2nd	51.____	52.____	53.__	54.__
3rd	55.____	56.____	57.__	58.__
4th	59.____	60.____	61.__	62.__
5th	63.____	64.____	65.__	66.__
6th	67.____	68.____	69.__	70.__
7th	71.____	72.____	73.__	74.__
8th	75.____	76.____	77.__	78.__
9th	79.____	80.____	81.__	82.__
10th	83.____	84.____	85.__	86.__

LOCATION OF INTRUSION

NONE

Front Seat
- (11) Left
- (12) Middle
- (13) Right

Second Seat
- (21) Left
- (22) Middle
- (23) Right

Third Seat
- (31) Left
- (32) Middle
- (33) Right

Fourth Seat
- (41) Left
- (42) Middle
- (43) Right

(98) Other enclosed area (specify): _____

(99) Unknown

INTRUDING COMPONENT

Interior Components
- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back panel or door surface
- (26) Other interior component (specify): _____
- (27) Side panel - forward of the A-pillar
- (28) Side panel - rear of the A-pillar

Exterior Components
- (30) Hood
- (31) Outside surface of vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

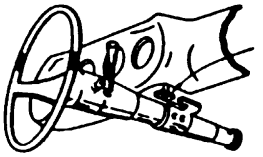
MAGNITUDE OF INTRUSION
- (1) ≥ 1 inch but < 3 inches
- (2) ≥ 3 inches but < 6 inches
- (3) ≥ 6 inches but < 12 inches
- (4) ≥ 12 inches but < 18 inches
- (5) ≥ 18 inches but < 24 inches
- (6) ≥ 24 inches
- (9) Unknown

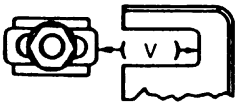
DOMINANT CRUSH DIRECTION
- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (9) Unknown

STEERING COLUMN WORKING DIAGRAMS

STEERING COLUMN COLLAPSE

Steering Column Shear Module Movement

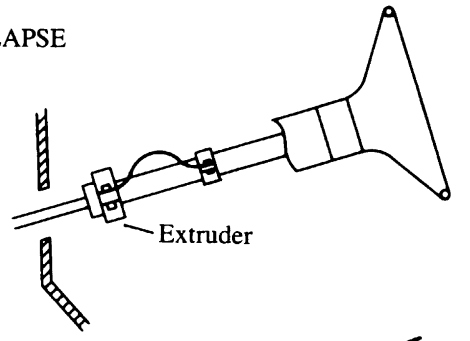




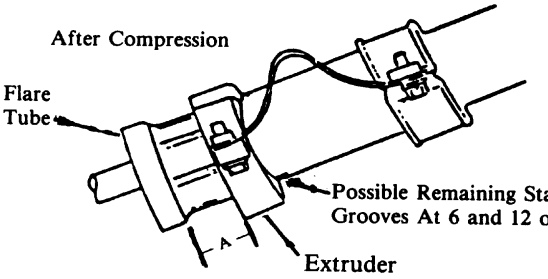
Left ____

Right ____ V = _____"

Direction and Magnitude of Steering Column Movement



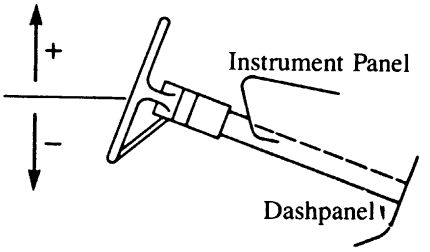
After Compression



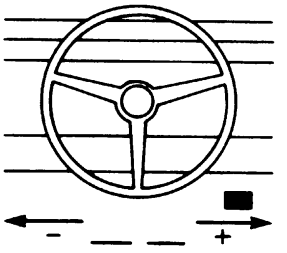
Compression = Measurement A A =_____

STEERING COLUMN MOVEMENT

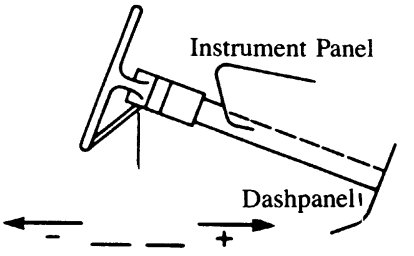
Vertical Movement



Lateral Movement



Longitudinal Movement



	COMPARISON VALUE – DAMAGED VALUE = MOVEMENT
VERTICAL	– =
LATERAL	– =
LONGITUDINAL	– =

STEERING RIM/SPOKE DEFORMATION

COMPARISON VALUE – DAMAGED VALUE = DEFORMATION
– =
– =

STEERING COLUMN

87. Steering Column Type 1
(1) Fixed column
(2) Tilt column
(3) Telescoping column
(4) Tilt and telescoping column
(8) Other column type (specify):

(9) Unknown

If PDOF ≠ 11, 12 or 1, Then Code IV88-IV91 As 96

88. Steering Column Collapse Due to Occupant Loading 00

_____ **Code actual measured movement to the nearest inch. See coding manual for measurement technique(s).**
(00) No movement, compression, or collapse
(01-49) Actual measured value
(50) 50 inches or greater

Estimated movement from observation
(81) Less than 1 inch
(82) ≥ 1 inch but < 2 inches
(83) ≥ 2 inches but < 4 inches
(84) ≥ 4 inches but < 6 inches
(85) ≥ 6 inches but < 8 inches
(86) Greater than or equal to 8 inches
(96) Not assessed (PDOF ≠ 11, 12, 1)
(97) Apparent movement, value undetermined or cannot be measured or estimated
(98) Nonspecified type column
(99) Unknown

Direction And Magnitude of Steering Column Movement

89. Vertical Movement ± 00

90. Lateral Movement ± 00

91. Longitudinal Movement ± 00

Code the actual measured movement to the nearest inch. See Coding Manual for measurement technique(s)
(+00) No Steering column movement
(±01 – ±49) Actual measured value
(±50) 50 inches or greater

Estimated movement from observation
(±81) ≥ 1 inch but < 3 inches
(±82) ≥ 3 inches but < 6 inches
(±83) ≥ 6 inches but < 12 inches
(±84) ≥ 12 inches
(__96) Not assessed (PDOF ≠ 11, 12, 1)
(__97) Apparent movement > 1 inch but cannot be measured or estimated
(__99) Unknown

92. Steering Rim/Spoke Deformation 0

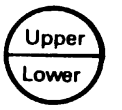
_____ **Code actual measured deformation to the nearest inch.**
(0) No steering rim deformation
(1-5) Actual measured value
(6) 6 inches or more
(8) Observed deformation cannot be measured
(9) Unknown

93. Location of Steering Rim/Spoke Deformation 00

(00) No steering rim deformation

Quarter Sections
(01) Section A
(02) Section B
(03) Section C
(04) Section D

Half Sections
(05) Upper half of rim/spoke
(06) Lower half of rim/spoke
(07) Left half of rim/spoke
(08) Right half of rim/spoke



(09) Complete steering wheel collapse
(10) Undetermined location
(99) Unknown

INSTRUMENT PANEL

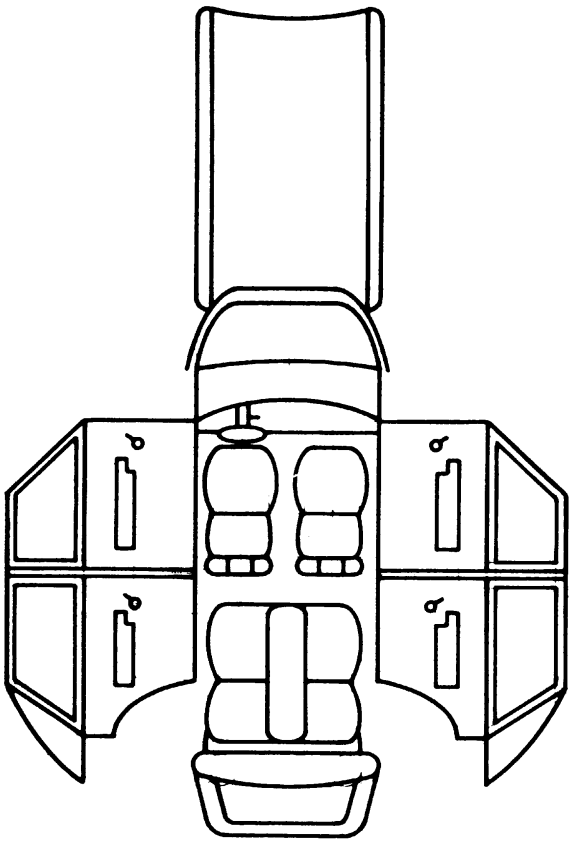
94. Odometer Reading 091,000
91204 **miles – Code mileage to the nearest 1,000 miles**
(000) No odometer
(001) Less than 1,500 miles
(300) 299,500 miles or more
(999) Unknown
Source: [redacted]

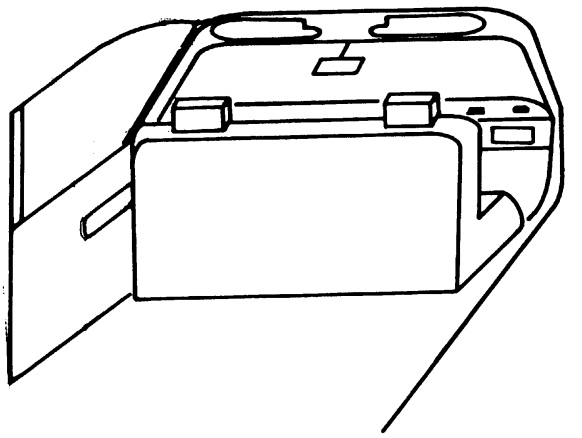
95. Instrument Panel Damage from Occupant Contact 1
(0) No
(1) Yes
(9) Unknown

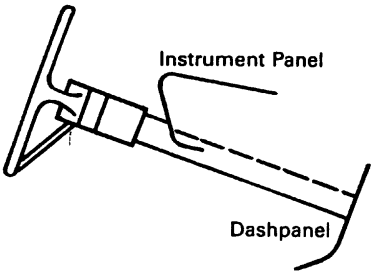
96. Knee Bolsters Deformed from Occupant Contact 8
(0) No
(1) Yes
(8) Not present
(9) Unknown

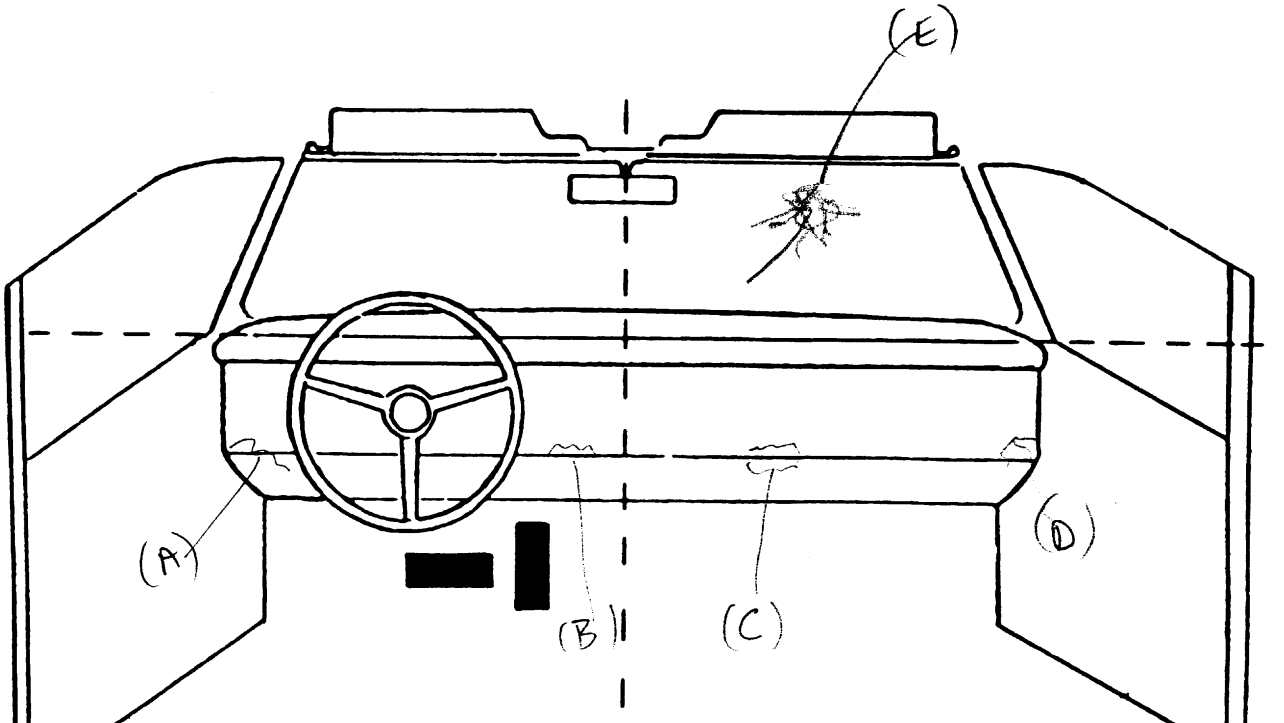
97. Did Glove Compartment Door Open During Collision(s) 0
(0) No
(1) Yes
(8) Not present
(9) Unknown

VEHICLE INTERIOR SKETCHES









Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	09	1	L) KNEE	BENT PANEL	1
B	10	1	R) KNEE	" "	1
C	10	2	L) KNEE	" "	1
D	11	2	R) KNEE	" "	1
E	01	2	FACE	CRACKED GLASS & SMUDGE	1
F					
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT
- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror,or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify): _____

LEFT SIDE
- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify): _____
- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
- (27) Other left side object (specify): _____

RIGHT SIDE
- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify): _____
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
- (37) Other right side object (specify): _____

INTERIOR
- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): _____
- (44) Head restraint system
- (45) Air cushion
- (46) Other occupants (specify): _____
- (47) Interior loose objects
- (48) Child safety seat (specify): _____
- (49) Other interior object (specify): _____

ROOF
- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR
- (56) Floor including toe pan
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR
- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

CONFIDENCE LEVEL OF CONTACT POINT
- (1) Certain
- (2) Probable
- (3) Possible
- (4) Unknown

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attributes for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Availability			
	Function			
	Failure			

Automatic (Passive) Restraint System Availability

(0) Not equipped/not available
(1) Airbag
(2) Airbag disconnected (specify):

_____

(3) Airbag not reinstalled
(4) 2 point automatic belts
(5) 3 point automatic belts
(6) Automatic belts destroyed or rendered inoperative
(9) Unknown

Automatic (Passive) Restraint Function

(0) Not equipped/not available

Automatic Belt
(1) Automatic belt in use
(2) Automatic belt not in use
(3) Automatic belt use unknown

Air Bag
(4) Airbag deployed during accident
(5) Airbag deployed inadvertently just prior to accident
(6) Deployed, accident sequence undetermined
(7) Nondeployed
(8) Unknown if deployed
(9) Unknown

Did Automatic (Passive) Restraint Fail

(0) Not equipped/not available
(1) No
(2) Yes (specify): _____
(9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data **for each seat position** in the vehicle. The attributes for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	3	3	3
	Use	00	00	00
	Failure Modes	0	0	0
SECOND	Availability	3	3	3
	Use	00	00	00
	Failure Modes	0	0	0
THIRD	Availability			
	Use			
	Failure Modes			
OTHER	Availability			
	Use			
	Failure Modes			

Manual (Active) Belt System Availability

(0) Not available
(1) Belt removed/destroyed
(2) Shoulder belt
(3) Lap belt
(4) Lap and shoulder belt
(5) Belt available – type unknown
(8) Other belt (specify):

_____

(9) Unknown

Manual (Active) Belt System Use

(00) None used, not available, or belt removed/destroyed
(01) Inoperative (specify):

_____

(02) Shoulder belt
(03) Lap belt
(04) Lap and shoulder belt
(05) Belt used – type unknown

_____

(08) Other belt used (specify):

_____

(12) Shoulder belt used with child safety seat
(13) Lap belt used with child safety seat
(14) Lap and shoulder belt used with child safety seat
(15) Belt used with child safety seat – type unknown
(18) Other belt used with child safety seat (specify):

_____

(99) Unknown if belt used

Manual (Active) Belt Failure Modes During Accident

(0) No manual belt used or not available
(1) No manual belt failure(s)
(2) Manual belt failure(s) (encode all that apply above)
[A] Torn webbing (stretched webbing not included)
[B] Broken buckle or latchplate
[C] Upper anchorage separated
[D] Other achorage separated (specify):

_____

[E] Broken retractor
[F] Other manual belt failure (specify):

_____

(9) Unknown

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

(0) No child safety seat
(1) Infant seat
(2) Toddler seat
(3) Convertible seat
(4) Booster seat
(7) Other type child safety seat (specify):

_____

(8) Unknown child safety seat type
(9) Unknown if child safety seat used

2. Child Safety Seat Orientation

(00) No child safety seat

Designed for Rear Facing for This Age/Weight
(01) Rear facing
(02) Forward facing
(03) Other orientation (specify):

_____

(04) Unknown orientation

Designed for Forward Facing for This Age/Weight
(11) Rear facing
(12) Forward facing
(18) Other orientation (specify):

_____

(19) Unknown orientation

Unknown Design or Orientation for This Age/Weight, or Unknown Age/Weight
(21) Rear facing
(22) Forward facing
(28) Other orientation (specify):

_____

(29) Unknown orientation

(99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

(00) No child safety seat

Not Designed with Harness/Shield/Tether
(01) After market harness/shield/tether added, not used
(02) After market harness/shield/tether used
(03) Child safety seat used, but no after market harness/shield/tether added
(09) Unknown if harness/shield/tether added or used

Designed with Harness/Shield/Tether
(11) Harness/shield/tether not used
(12) Harness/shield/tether used
(19) Unknown if harness/shield/tether used

Unknown if Designed with Harness/Shield/Tether
(21) Harness/shield/tether not used
(22) Harness/shield/tether used
(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

6. Child Safety Seat Make/Model
(Specify make/model and occupant number)

_____

_____

_____

_____

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for **each seat position** in the vehicle. The attributes for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3	0	3
	Seat Type	03	03	03
	Seat Performance	1	1	1
SECOND	Head Restraint Type/Damage	0	0	0
	Seat Type	05	05	05
	Seat Performance	1	1	1
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			

Head Restraint Type/Damage by Occupant at This Occupant Position

(0) No head restraints
(1) Integral – no damage
(2) Integral – damaged during accident
(3) Adjustable – no damage
(4) Adjustable – damaged during accident
(5) Add-on – no damage
(6) Add-on – damaged during accident
(8) Other (specify): _____
(9) Unknown

Seat Type (This Occupant Position)

(00) No seat
(01) Bucket
(02) Bucket with folding back
(03) Bench
(04) Bench with separate back cushions
(05) Bench with folding back(s)
(06) Split bench with separate back cushions
(07) Split bench with folding back(s)
(08) Pedestal (i.e., van type)
(09) Other seat type (specify): _____
(99) Unknown

Seat Performance (This Occupant Position)

(0) No seat
(1) No seat performance failure(s)
(2) Seat performance failure(s)
(Encode all that apply)

[A] Seat adjusters failed
[B] Seat back folding locks failed
[C] Seat tracks failed
[D] Seat anchors failed
[E] Deformed by impact of passenger from rear
[F] Deformed by impact of passenger from front
[G] Deformed by own inertial forces
[H] Deformed by passenger compartment intrusion (specify):

_____
_____
_____

[I] Other (specify): _____
_____

(9) Unknown

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E. UNUSUAL OCCUPANT CONTACT PATTERN)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indications that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION **No** [X] **Yes** [ ]

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
Ejection Area						
Ejection Medium						
Medium Status						

Ejection
(1) Complete ejection
(2) Partial ejection
(3) Ejection, unknown degree
(9) Unknown

Ejection Area
(1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear
(7) Roof
(8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

Ejection Medium
(1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify):

(5) Integral structure
(8) Other medium (specify):

(9) Unknown

Medium Status (Immediately Prior to Impact)
(1) Open
(2) Closed
(3) Integral structure
(9) Unknown

ENTRAPMENT **No** [X] **Yes** [ ]

Describe entrapment mechanism:

Component(s):

(Note in vehicle interior diagram)

U.S. Department of Transportation

National Highway Traffic Safety Administration

OCCUPANT INJURY FORM

Form Approved
O.M.B. No. 2127-0021
NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 45
2. Case Number–Stratum: 121F
3. Vehicle Number: 01
4. Occupant Number: 01

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than twenty injuries have been documented, encode the balance on the Occupant Injury Supplement.

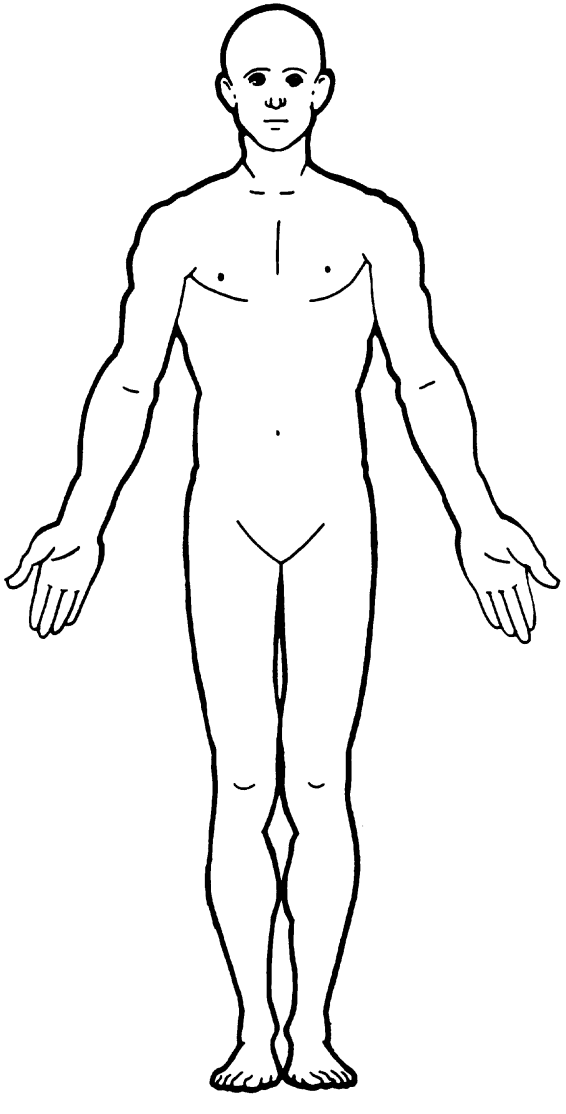
	Source of Injury Data	O.I.C.–A.I.S. Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
1st	5. 7	6. F	7. S	8. C	9. I	10. 1	11. 01	12. 3	13. 1	14. 00
2nd	15. 7	16. K	17. R	18. C	19. I	20. 1	21. 10	22. 1	23. 1	24. 00
3rd	25. 7	26. K	27. L	28. C	29. I	30. 1	31. 09	32. 1	33. 1	34. 00
4th	35. 7	36. R	37. L	38. L	39. I	40. 1	41. 04	42. 3	43. 1	44. 00
5th	45.	46.	47.	48.	49.	50.	51.	52.	53.	54.
6th	55.	56.	57.	58.	59.	60.	61.	62.	63.	64.
7th	65.	66.	67.	68.	69.	70.	71.	72.	73.	74.
8th	75.	76.	77.	78.	79.	80.	81.	82.	83.	84.
9th	85.	86.	87.	88.	89.	90.	91.	92.	93.	94.
10th	95.	96.	97.	98.	99.	100.	101.	102.	103.	104.
11th	105.	106.	107.	108.	109.	110.	111.	112.	113.	114.
12th	115.	116.	117.	118.	119.	120.	121.	122.	123.	124.
13th	125.	126.	127.	128.	129.	130.	131.	132.	133.	134.
14th	135.	136.	137.	138.	139.	140.	141.	142.	143.	144.
15th	145.	146.	147.	148.	149.	150.	151.	152.	153.	154.
16th	155.	156.	157.	158.	159.	160.	161.	162.	163.	164.
17th	165.	166.	167.	168.	169.	170.	171.	172.	173.	174.
18th	175.	176.	177.	178.	179.	180.	181.	182.	183.	184.
19th	185.	186.	187.	188.	189.	190.	191.	192.	193.	194.
20th	195.	196.	197.	198.	199.	200.	201.	202.	203.	204.

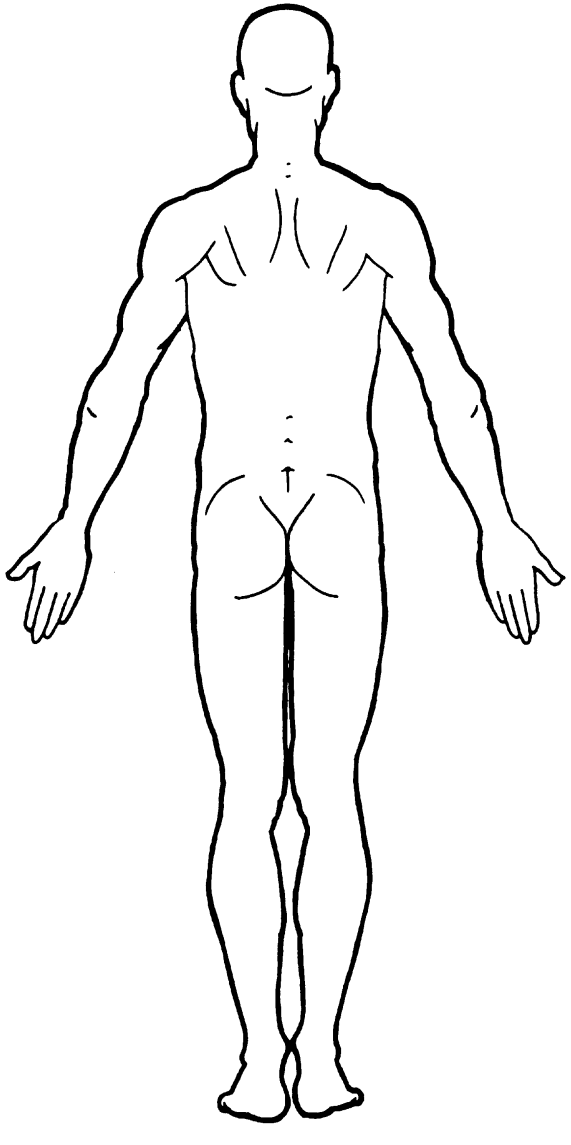
OCCUPANT INJURY DATA SUPPLEMENT

	Source of Injury Data	O.I.C. – A.I.S.					Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
		Body Region	Aspect	Lesion	System Organ	A.I.S. Severity				
21st	___	___	___	___	___	___	___ ___	___	___	___ ___
22nd	___	___	___	___	___	___	___ ___	___	___	___ ___
23rd	___	___	___	___	___	___	___ ___	___	___	___ ___
24th	___	___	___	___	___	___	___ ___	___	___	___ ___
25th	___	___	___	___	___	___	___ ___	___	___	___ ___
26th	___	___	___	___	___	___	___ ___	___	___	___ ___
27th	___	___	___	___	___	___	___ ___	___	___	___ ___
28th	___	___	___	___	___	___	___ ___	___	___	___ ___
29th	___	___	___	___	___	___	___ ___	___	___	___ ___
30th	___	___	___	___	___	___	___ ___	___	___	___ ___
31st	___	___	___	___	___	___	___ ___	___	___	___ ___
32nd	___	___	___	___	___	___	___ ___	___	___	___ ___
33rd	___	___	___	___	___	___	___ ___	___	___	___ ___
34th	___	___	___	___	___	___	___ ___	___	___	___ ___
35th	___	___	___	___	___	___	___ ___	___	___	___ ___
36th	___	___	___	___	___	___	___ ___	___	___	___ ___
37th	___	___	___	___	___	___	___ ___	___	___	___ ___
38th	___	___	___	___	___	___	___ ___	___	___	___ ___
39th	___	___	___	___	___	___	___ ___	___	___	___ ___
40th	___	___	___	___	___	___	___ ___	___	___	___ ___
41st	___	___	___	___	___	___	___ ___	___	___	___ ___
42nd	___	___	___	___	___	___	___ ___	___	___	___ ___
43rd	___	___	___	___	___	___	___ ___	___	___	___ ___
44th	___	___	___	___	___	___	___ ___	___	___	___ ___
45th	___	___	___	___	___	___	___ ___	___	___	___ ___

OFFICIAL INJURY DATA—SOFT TISSUE INJURIES

Indicate the *Location, Lesion, Detail* (size, depth, fracture type, head injury clinical signs and neurological deficits), and *Source* of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





SOURCE OF INJURY DATA

OFFICIAL

(1) Autopsy records with or without hospital medical records
(2) Hospital medical records other than emergency room (eg. discharge summary)
(3) Emergency room records only (including associated X-rays or other lab reports)
(4) Private physician, walk-in or emergency clinic

UNOFFICIAL

(5) Lay coroner report
(6) E.M.S. personnel
(7) Interviewee
(8) Other source (specify):

_____

(9) Police

INJURY SOURCE

FRONT

(01) Windshield
(02) Mirror
(03) Sunvisor
(04) Steering wheel rim
(05) Steering wheel hub/spoke
(06) Steering wheel (combination of codes 04 and 05)
(07) Steering column, transmission selector lever, other attachment
(08) Add-on equipment (e.g., CB, tape deck, air conditioner)
(09) Left instrument panel and below
(10) Center instrument panel and below
(11) Right instrument panel and below
(12) Glove compartment door
(13) Knee bolster
(14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
(15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
(16) Other front object (specify):

_____

LEFT SIDE

(20) Left side interior surface, excluding hardware or armrests
(21) Left side hardware or armrest
(22) Left A pillar
(23) Left B pillar
(24) Other left pillar (specify):

_____

(25) Left side window glass or frame
(26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
(27) Other left side object (specify):

_____

RIGHT SIDE

(30) Right side interior surface, excluding hardware or armrests
(31) Right side hardware or armrest
(32) Right A pillar
(33) Right B pillar
(34) Other right pillar (specify):

_____

(35) Right side window glass or frame
(36) Right side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, roof side rail
(37) Other right side object (specify):

_____

INTERIOR

(40) Seat, back support
(41) Belt restraint webbing/buckle
(42) Belt restraint B-pillar attachment point
(43) Other restraint system component (specify):

_____

(44) Head restraint system
(45) Air cushion
(46) Other occupants (specify):

_____

(47) Interior loose objects
(48) Child safety seat (specify):

_____

(49) Other interior object (specify):

_____

ROOF

(50) Front header
(51) Rear header
(52) Roof left side rail
(53) Roof right side rail
(54) Roof or convertible top

FLOOR

(56) Floor including toe pan
(57) Floor or console mounted transmission lever, including console
(58) Parking brake handle
(59) Foot controls including parking brake

REAR

(60) Backlight (rear window)
(61) Backlight storage rack, door, etc.
(62) Other rear object (specify):

_____

EXTERIOR OF OCCUPANT'S VEHICLE

(65) Hood
(66) Outside hardware (e.g., outside mirror, antenna)
(67) Other exterior surface or tires (specify):

_____

(68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

(70) Front bumper
(71) Hood edge
(72) Other front of vehicle (specify):

_____

(73) Hood
(74) Hood ornament
(75) Windshield, roof rail, A-pillar
(76) Side surface
(77) Side mirrors
(78) Other side protrusions (specify):

_____

(79) Rear surface
(80) Undercarriage
(81) Tires and wheels
(82) Other exterior of other motor vehicle (specify):

_____

(83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

(84) Ground
(85) Other vehicle or object (specify)

_____

(86) Unknown vehicle or object

NONCONTACT INJURY

(90) Fire in vehicle
(91) Flying glass
(92) Other noncontact injury source (specify)

_____

(97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

(1) Certain
(2) Probable
(3) Possible
(9) Unknown

DIRECT/INDIRECT INJURY

(1) Direct contact injury
(2) Indirect contact injury
(3) Noncontact injury
(7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION

O.I.C. Body Region

(M) Abdomen
(Q) Ankle–foot
(A) Arm (upper)
(B) Back–thoracolumbar spine
(C) Chest
(E) Elbow
(F) Face
(R) Forearm
(H) Head–skull
(U) Injured, unknown region
(K) Knee
(L) Leg (lower)
(Y) Lower limb(s) (whole or unknown part)
(N) Neck–cervical spine
(P) Pelvic–hip
(S) Shoulder
(T) Thigh
(X) Upper limb(s) (whole or unknown part)
(O) Whole body
(W) Wrist–hand

Aspect of Injury

(A) Anterior–front
(B) Bilateral (rib fracture only).
(C) Central
(I) Inferior–lower
(U) Injured, unknown aspect
(L) Left
(P) Posterior–back
(R) Right
(S) Superior–upper
(W) Whole region

Lesion

(A) Abrasion
(M) Amputation
(V) Avulsion
(B) Burn
(K) Concussion
(C) Contusion
(N) Crush
(G) Detachment, separation
(D) Dislocation
(F) Fracture
(Z) Fracture and dislocation
(U) Injured, unknown lesion
(L) Laceration
(O) Other
(P) Perforation, puncture
(R) Rupture
(S) Sprain
(T) Strain
(E) Total severance, transection

System/Organ

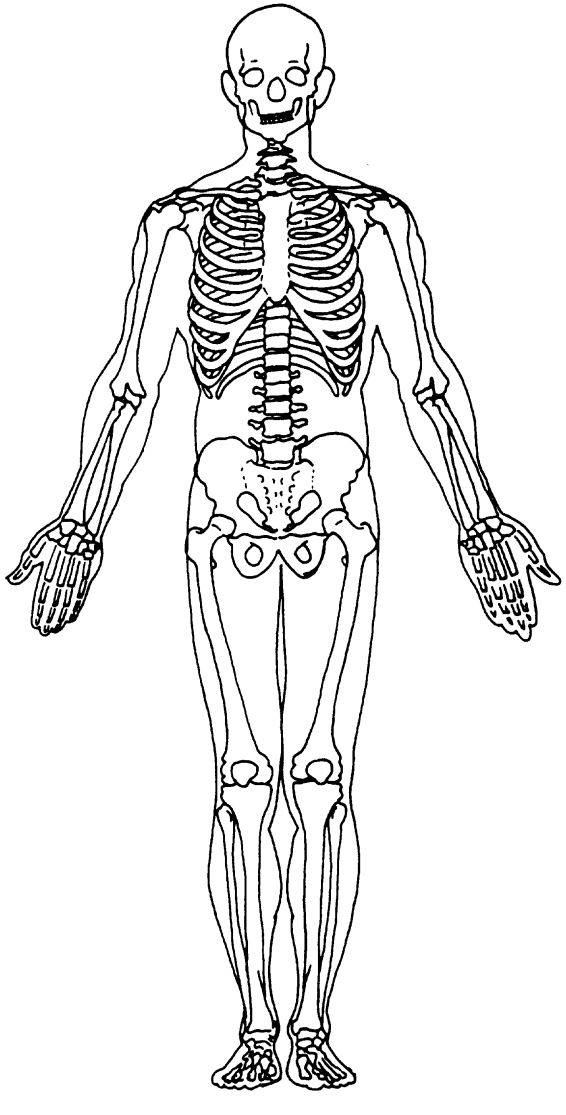
(W) All systems in region
(A) Arteries–veins
(B) Brain
(D) Digestive
(E) Ears
(O) Eye
(H) Heart
(U) Injured, unknown system
(I) Integumentary
(J) Joints
(K) Kidneys
(L) Liver
(M) Muscles
(N) Nervous system
(P) Pulmonary–lungs
(R) Respiratory
(S) Skeletal
(C) Spinal cord
(Q) Spleen
(T) Thyroid, other endocrine gland
(G) Urogenital
(V) Vertebrae

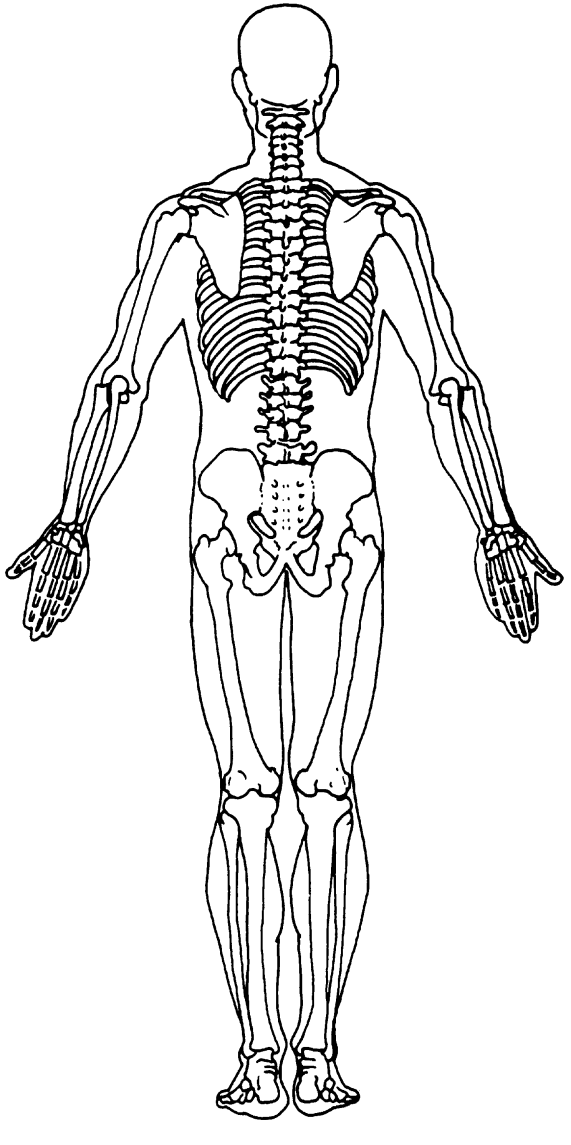
Abbreviated Injury Scale

(1) Minor injury
(2) Moderate injury
(3) Serious injury
(4) Severe injury
(5) Critical injury
(6) Maximum (untreatable)
(7) Injured, unknown severity

OFFICIAL INJURY DATA—SKELETAL INJURIES

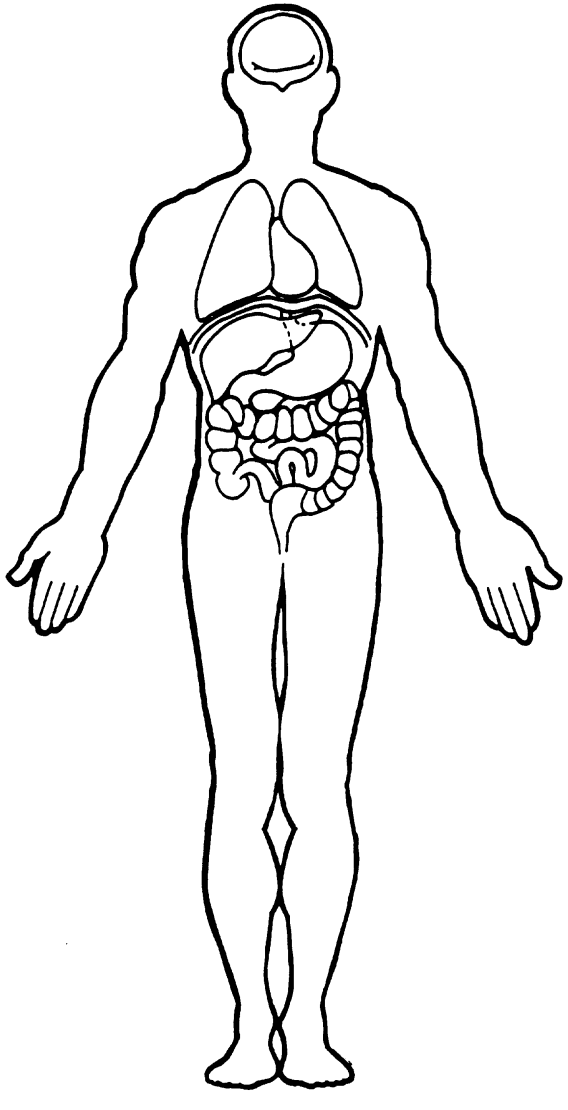
Indicate the *Location, Lesion, Detail* (size, depth, fracture type, head injury clinical signs and neurological deficits), and *Source* of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

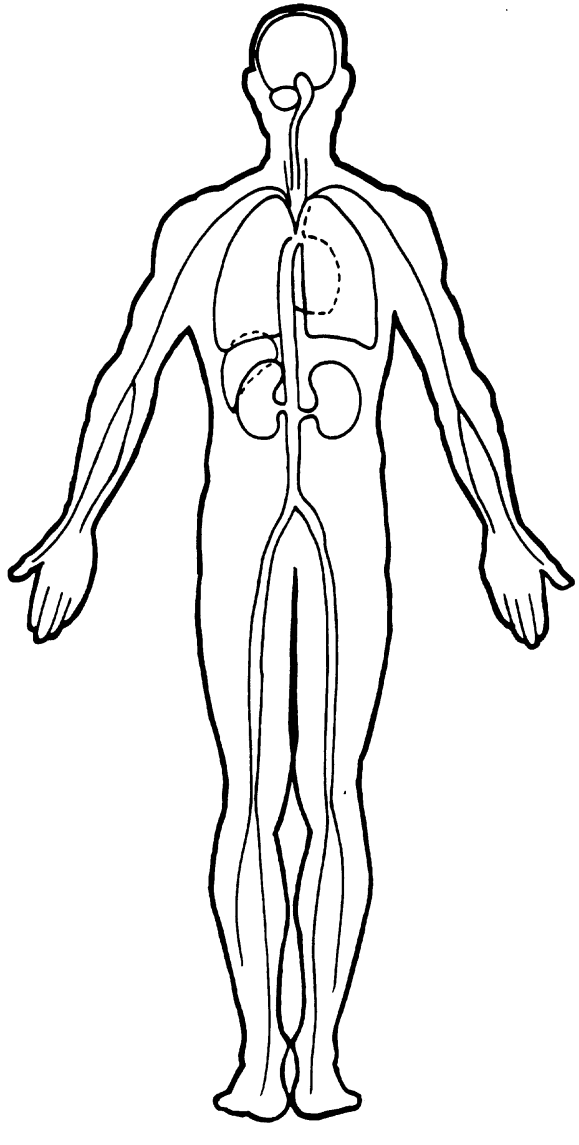




OFFICIAL INJURY DATA – INTERNAL INJURIES

Indicate the *Location, Lesion, Detail* (size, depth, fracture type, head injury clinical signs and neurological deficits), and *Source* of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





DWG

U.S. Department of Transportation
National Highway Traffic Safety Administration

UPDATE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 45
2. Case Number – Stratum: 12 1 F
3. Vehicle Number: 01
4. Occupant Number: 01

RECEIVED [redacted] 1989

Driver or Occupant Name: [redacted]
Address: [redacted]

Other Information: _____

(Sanitize this section prior to Update submission.)

INJURY DATA CODED ON INITIAL SUBMISSION

	Source of Injury Data	O.I.C.–A.I.S. Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
1st	5. 7	6. F	7. S	8. C	9. I	10. 1	11. 01	12. 3	13. 1	14. 00
2nd	15. 7	16. K	17. R	18. C	19. I	20. 1	21. 10	22. 1	23. 1	24. 00
3rd	25. 7	26. K	27. L	28. C	29. I	30. 1	31. 09	32. 1	33. 1	34. 00
4th	35. 7	36. R	37. L	38. L	39. I	40. 1	41. 04	42. 3	43. 1	44. 00
5th	45.	46.	47.	48.	49.	50.	51.	52.	53.	54.
6th	55.	56.	57.	58.	59.	60.	61.	62.	63.	64.
7th	65.	66.	67.	68.	69.	70.	71.	72.	73.	74.
8th	75.	76.	77.	78.	79.	80.	81.	82.	83.	84.
9th	85.	86.	87.	88.	89.	90.	91.	92.	93.	94.
10th	95.	96.	97.	98.	99.	100.	101.	102.	103.	104.

NOTE: If necessary, keep copy of original Occupant Injury form and submit as part of update.

UPDATED CASE INFORMATION

	INITIAL SUBMISSION	FINAL
GV12. Alcohol Test Results for Driver	96	96
OA05. Occupant's Age	66	66
OA06. Occupant's Sex	1	1
OA07. Occupant's Height	74	74
OA08. Occupant's Weight	201	201
OA17. Manual (Active) Belt System Availability	3	3
OA18. Manual (Active) Belt System Use	00	00
OA21. Automatic (Passive) Restraint System Availability	0	0
OA22. Automatic (Passive) Restraint Function	0	0

	INITIAL SUBMISSION	FINAL
OA35. Treatment – Mortality	4	4
OA36. Type of Medical Facility (for Initial Treatment)	1	1
OA37. Hospital Stay	00	00
OA38. Working Days Lost	97	97
OA39. Time to Death	00	00
OA40. 1st Medically Reported Cause of Death	00	00
OA41. 2nd Medically Reported Cause of Death	00	00
OA42. 3rd Medically Reported Cause of Death	00	00
OA43. Number of Recorded Injuries for This Occupant	04	04

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the unofficial and official sources prior to initial case submission **and from subsequently** acquired medical data. Remember not to double count an injury just because it was identified from two different sources.

	Source of Injury Data	O.I.C. – A.I.S. Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
1st	5. 3	6. F	7. S	8. C	9. I	10. 1	11. 01	12. 3	13. 1	14. 00
2nd	15. 3	16. K	17. R	18. L	19. I	20. 1	21. 10	22. 1	23. 1	24. 00
3rd	25. 3	26. K	27. L	28. C	29. I	30. 1	31. 09	32. 1	33. 1	34. 00
4th	35. 3	36. R	37. L	38. L	39. I	40. 1	41. 04	42. 3	43. 1	44. 00
5th	45. 3	46. R	47. L	48. A	49. I	50. 1	51. 04	52. 3	53. 1	54. 00
6th	55.	56.	57.	58.	59.	60.	61.	62.	63.	64.
7th	65.	66.	67.	68.	69.	70.	71.	72.	73.	74.
8th	75.	76.	77.	78.	79.	80.	81.	82.	83.	84.
9th	85.	86.	87.	88.	89.	90.	91.	92.	93.	94.
10th	95.	96.	97.	98.	99.	100.	101.	102.	103.	104.
11th	105.	106.	107.	108.	109.	110.	111.	112.	113.	114.
12th	115.	116.	117.	118.	119.	120.	121.	122.	123.	124.
13th	125.	126.	127.	128.	129.	130.	131.	132.	133.	134.
14th	135.	136.	137.	138.	139.	140.	141.	142.	143.	144.
15th	145.	146.	147.	148.	149.	150.	151.	152.	153.	154.
16th	155.	156.	157.	158.	159.	160.	161.	162.	163.	164.
17th	165.	166.	167.	168.	169.	170.	171.	172.	173.	174.
18th	175.	176.	177.	178.	179.	180.	181.	182.	183.	184.
19th	185.	186.	187.	188.	189.	190.	191.	192.	193.	194.
20th	195.	196.	197.	198.	199.	200.	201.	202.	203.	204.

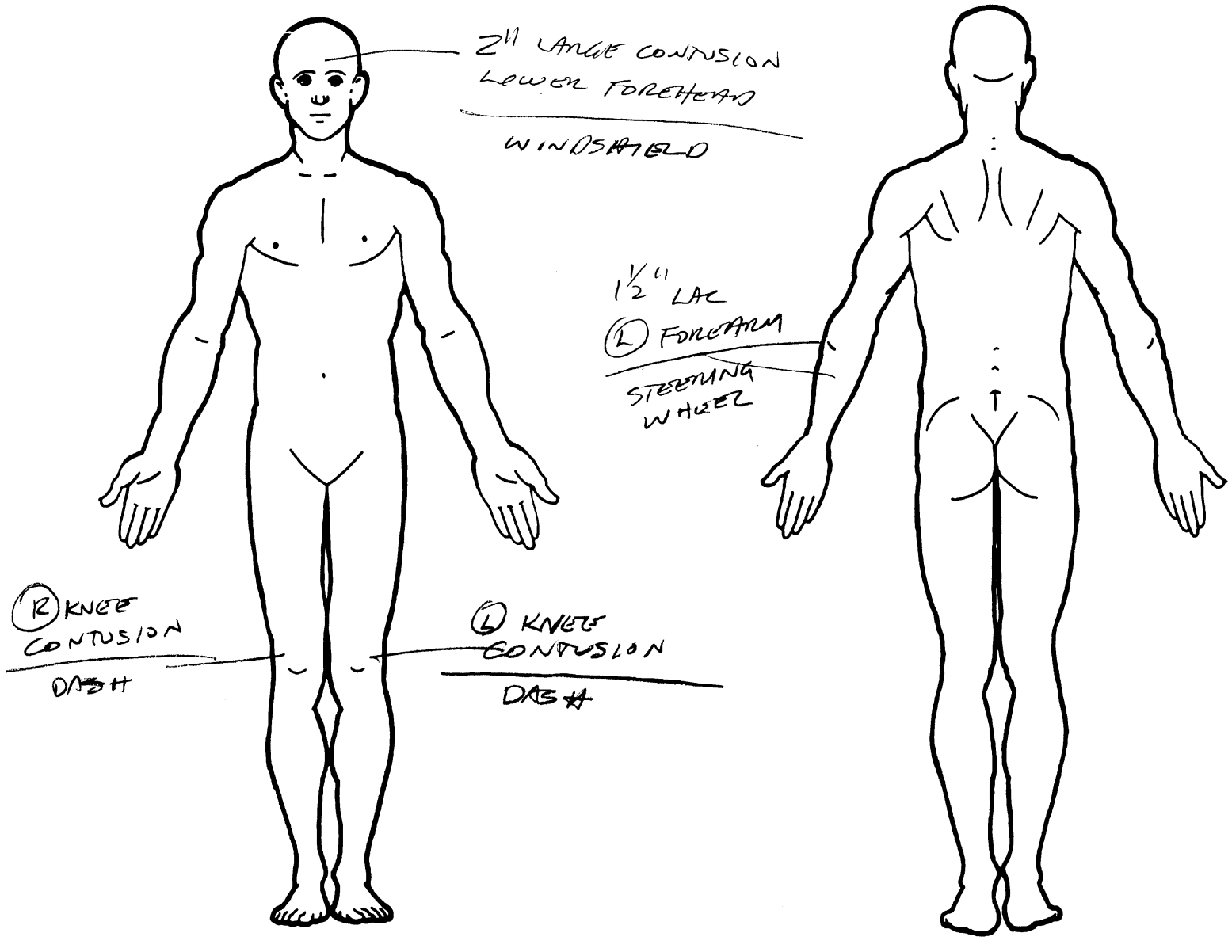
If greater than 20 injuries, code additional on Occupant Injury Data Supplement.

OCCUPANT INJURY DATA SUPPLEMENT

	Source of Injury Data	O.I.C. – A.I.S.					Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
		Body Region	Aspect	Lesion	System Organ	A.I.S. Severity				
21st	—	—	—	—	—	—	— —	—	—	— —
22nd	—	—	—	—	—	—	— —	—	—	— —
23rd	—	—	—	—	—	—	— —	—	—	— —
24th	—	—	—	—	—	—	— —	—	—	— —
25th	—	—	—	—	—	—	— —	—	—	— —
26th	—	—	—	—	—	—	— —	—	—	— —
27th	—	—	—	—	—	—	— —	—	—	— —
28th	—	—	—	—	—	—	— —	—	—	— —
29th	—	—	—	—	—	—	— —	—	—	— —
30th	—	—	—	—	—	—	— —	—	—	— —
31st	—	—	—	—	—	—	— —	—	—	— —
32nd	—	—	—	—	—	—	— —	—	—	— —
33rd	—	—	—	—	—	—	— —	—	—	— —
34th	—	—	—	—	—	—	— —	—	—	— —
35th	—	—	—	—	—	—	— —	—	—	— —
36th	—	—	—	—	—	—	— —	—	—	— —
37th	—	—	—	—	—	—	— —	—	—	— —
38th	—	—	—	—	—	—	— —	—	—	— —
39th	—	—	—	—	—	—	— —	—	—	— —
40th	—	—	—	—	—	—	— —	—	—	— —
41st	—	—	—	—	—	—	— —	—	—	— —
42nd	—	—	—	—	—	—	— —	—	—	— —
43rd	—	—	—	—	—	—	— —	—	—	— —
44th	—	—	—	—	—	—	— —	—	—	— —
45th	—	—	—	—	—	—	— —	—	—	— —

OFFICIAL INJURY DATA—SOFT TISSUE INJURIES

Indicate the *Location, Lesion, Detail* (size, depth, fracture type, head injury clinical signs and neurological deficits), and *Source* of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



SOURCE OF INJURY DATA

OFFICIAL

(1) Autopsy records with or without hospital medical records
(2) Hospital medical records other than emergency room (eg. discharge summary)
(3) Emergency room records only (including associated X-rays or other lab reports)
(4) Private physician, walk-in or emergency clinic

UNOFFICIAL

(5) Lay coroner report
(6) E.M.S. personnel
(7) Interviewee
(8) Other source (specify):

(9) Police

INJURY SOURCE

FRONT

(01) Windshield
(02) Mirror
(03) Sunvisor
(04) Steering wheel rim
(05) Steering wheel hub/spoke
(06) Steering wheel (combination of codes 04 and 05)
(07) Steering column, transmission selector lever, other attachment
(08) Add-on equipment (e.g., CB, tape deck, air conditioner)
(09) Left instrument panel and below
(10) Center instrument panel and below
(11) Right instrument panel and below
(12) Glove compartment door
(13) Knee bolster
(14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
(15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
(16) Other front object (specify):

LEFT SIDE

(20) Left side interior surface, excluding hardware or armrests
(21) Left side hardware or armrest
(22) Left A pillar
(23) Left B pillar
(24) Other left pillar (specify):

(25) Left side window glass or frame
(26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
(27) Other left side object (specify):

RIGHT SIDE

(30) Right side interior surface, excluding hardware or armrests
(31) Right side hardware or armrest
(32) Right A pillar
(33) Right B pillar
(34) Other right pillar (specify):

(35) Right side window glass or frame
(36) Right side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, roof side rail
(37) Other right side object (specify):

INTERIOR

(40) Seat, back support
(41) Belt restraint webbing/buckle
(42) Belt restraint B-pillar attachment point
(43) Other restraint system component (specify):

(44) Head restraint system
(45) Air cushion
(46) Other occupants (specify):

(47) Interior loose objects
(48) Child safety seat (specify):

(49) Other interior object (specify):

ROOF

(50) Front header
(51) Rear header
(52) Roof left side rail
(53) Roof right side rail
(54) Roof or convertible top

FLOOR

(56) Floor including toe pan
(57) Floor or console mounted transmission lever, including console
(58) Parking brake handle
(59) Foot controls including parking brake

REAR

(60) Backlight (rear window)
(61) Backlight storage rack, door, etc.
(62) Other rear object (specify):

EXTERIOR OF OCCUPANT'S VEHICLE

(65) Hood
(66) Outside hardware (e.g., outside mirror, antenna)
(67) Other exterior surface or tires (specify):

(68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

(70) Front bumper
(71) Hood edge
(72) Other front of vehicle (specify):

(73) Hood
(74) Hood ornament
(75) Windshield, roof rail, A-pillar
(76) Side surface
(77) Side mirrors
(78) Other side protrusions (specify):

(79) Rear surface
(80) Undercarriage
(81) Tires and wheels
(82) Other exterior of other motor vehicle (specify):

(83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

(84) Ground
(85) Other vehicle or object (specify)

(86) Unknown vehicle or object

NONCONTACT INJURY

(90) Fire in vehicle
(91) Flying glass
(92) Other noncontact injury source (specify)

(97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

(1) Certain
(2) Probable
(3) Possible
(9) Unknown

DIRECT/INDIRECT INJURY

(1) Direct contact injury
(2) Indirect contact injury
(3) Noncontact injury
(7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION

O.I.C. Body Region

(M) Abdomen
(Q) Ankle–foot
(A) Arm (upper)
(B) Back–thoracolumbar spine
(C) Chest
(E) Elbow
(F) Face
(R) Forearm
(H) Head–skull
(U) Injured, unknown region
(K) Knee
(L) Leg (lower)
(Y) Lower limb(s) (whole or unknown part)
(N) Neck–cervical spine
(P) Pelvic–hip
(S) Shoulder
(T) Thigh
(X) Upper limb(s) (whole or unknown part)
(O) Whole body
(W) Wrist–hand

Aspect of Injury

(A) Anterior–front
(B) Bilateral (rib fracture only).
(C) Central
(I) Inferior–lower
(U) Injured, unknown aspect
(L) Left
(P) Posterior–back
(R) Right
(S) Superior–upper
(W) Whole region

Lesion

(A) Abrasion
(M) Amputation
(V) Avulsion
(B) Burn
(K) Concussion
(C) Contusion
(N) Crush
(G) Detachment, separation
(D) Dislocation
(F) Fracture
(Z) Fracture and dislocation
(U) Injured, unknown lesion
(L) Laceration
(O) Other
(P) Perforation, puncture
(R) Rupture
(S) Sprain
(T) Strain
(E) Total severance, transection

System/Organ

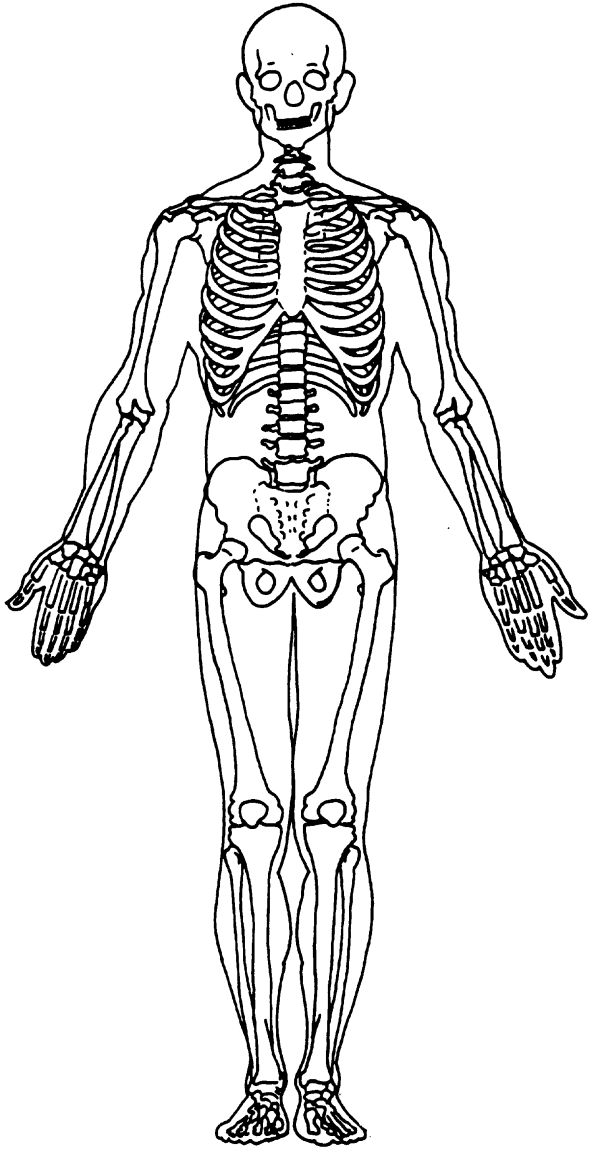
(W) All systems in region
(A) Arteries–veins
(B) Brain
(D) Digestive
(E) Ears
(O) Eye
(H) Heart
(U) Injured, unknown system
(I) Integumentary
(J) Joints
(K) Kidneys
(L) Liver
(M) Muscles
(N) Nervous system
(P) Pulmonary–lungs
(R) Respiratory
(S) Skeletal
(C) Spinal cord
(Q) Spleen
(T) Thyroid, other endocrine gland
(G) Urogenital
(V) Vertebrae

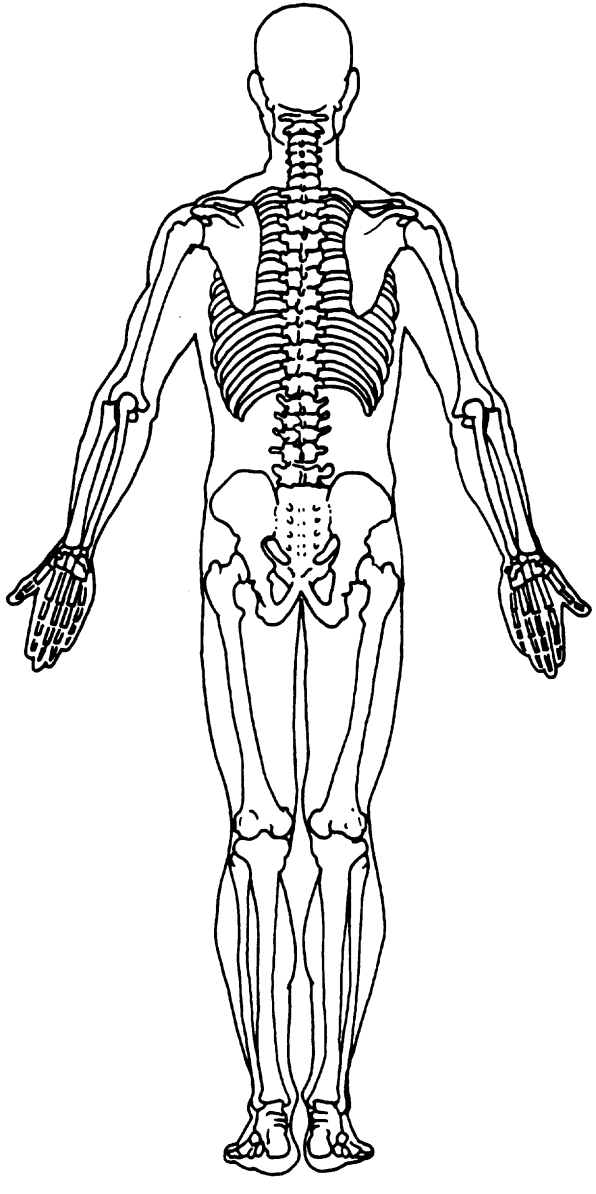
Abbreviated Injury Scale

(1) Minor injury
(2) Moderate injury
(3) Serious injury
(4) Severe injury
(5) Critical injury
(6) Maximum (untreatable)
(7) Injured, unknown severity

OFFICIAL INJURY DATA – SKELETAL INJURIES

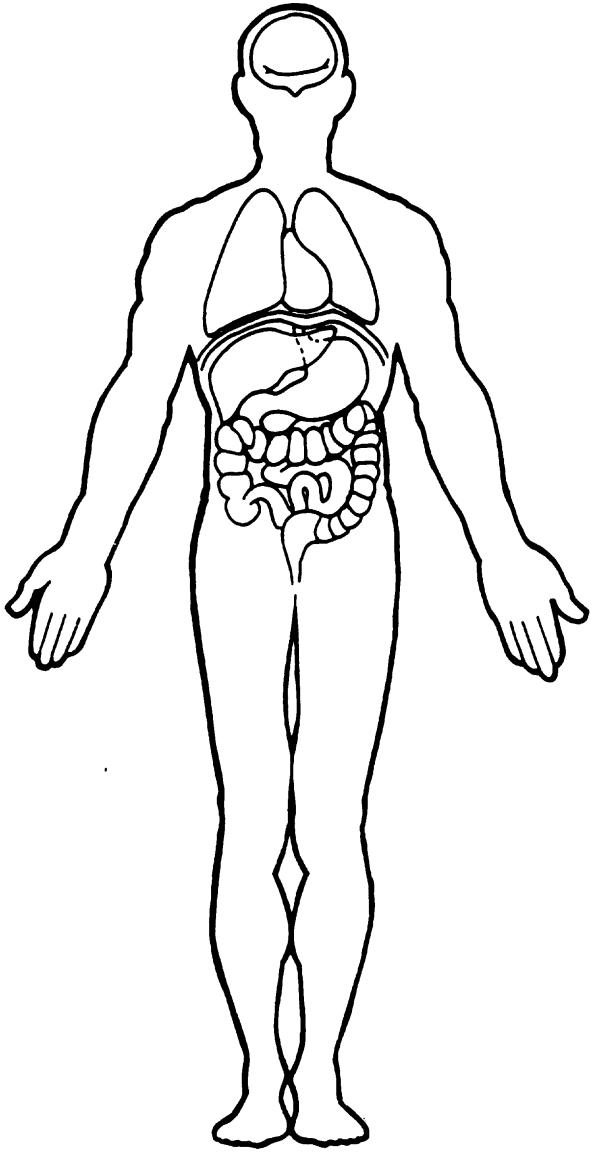
Indicate the *Location, Lesion, Detail* (size, depth, fracture type, head injury clinical signs and neurological deficits), and *Source* of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

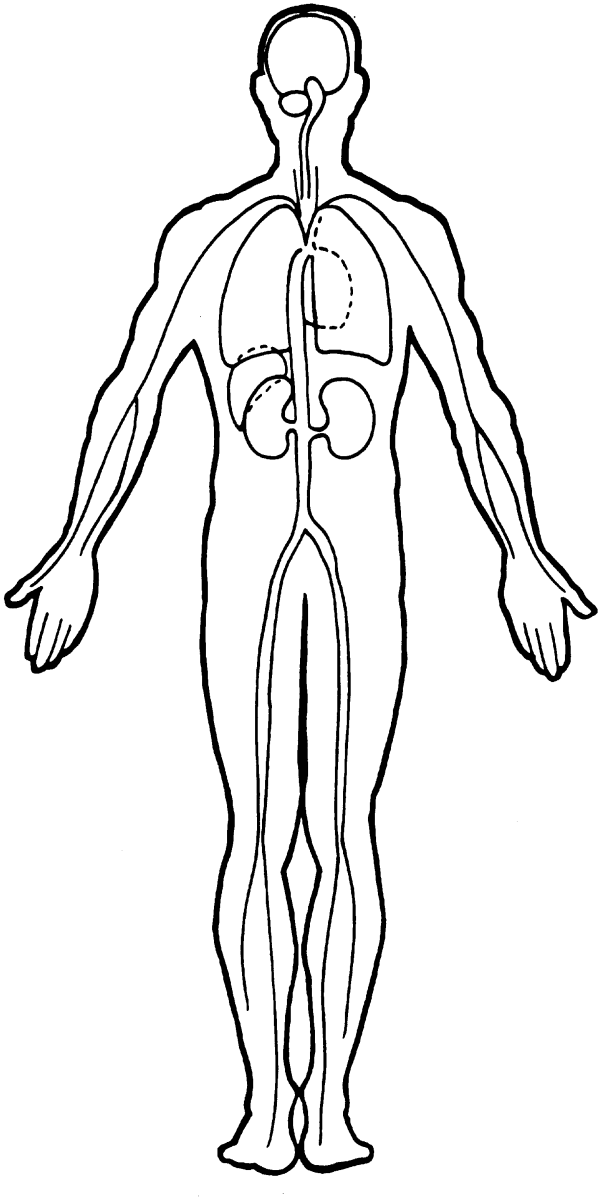




OFFICIAL INJURY DATA – INTERNAL INJURIES

Indicate the *Location, Lesion, Detail* (size, depth, fracture type, head injury clinical signs and neurological deficits), and *Source* of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





U.S. Department of Transportation

National Highway Traffic Safety Administration

OCCUPANT INJURY FORM

Form Approved
O.M.B. No. 2127-0021
NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 45
2. Case Number–Stratum: 121F
3. Vehicle Number: 01
4. Occupant Number: 02

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than twenty injuries have been documented, encode the balance on the Occupant Injury Supplement.

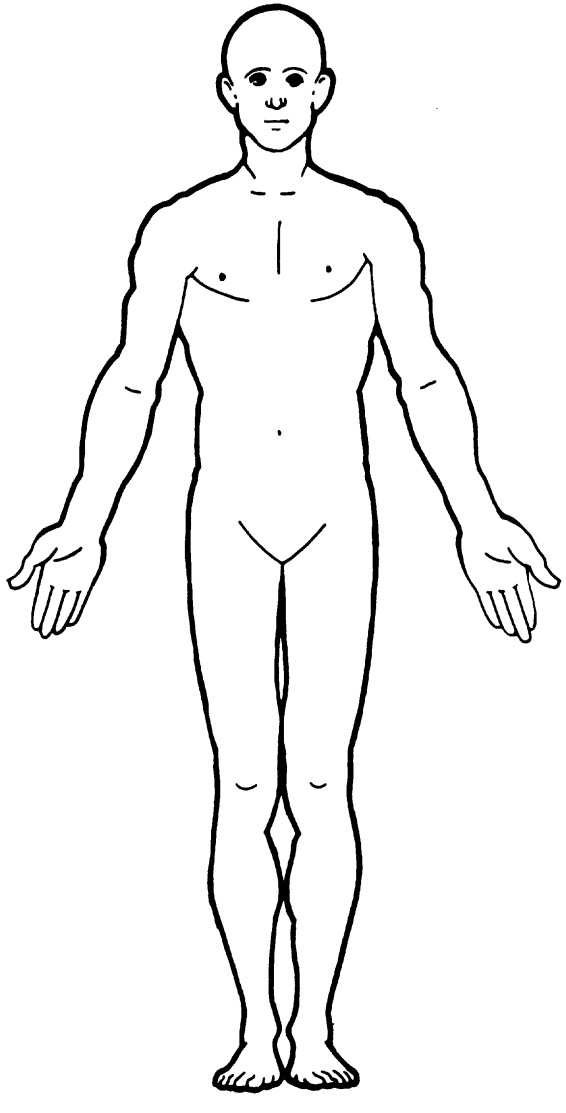
	Source of Injury Data	O.I.C.–A.I.S. Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
1st	5. 2	6. F	7. S	8. C	9. I	10. 1	11. 01	12. 1	13. 1	14. 00
2nd	15. 2	16. K	17. R	18. C	19. I	20. 1	21. 11	22. 1	23. 1	24. 00
3rd	25. 2	26. K	27. L	28. C	29. I	30. 1	31. 10	32. 1	33. 1	34. 00
4th	35.	36.	37.	38.	39.	40.	41.	42.	43.	44.
5th	45.	46.	47.	48.	49.	50.	51.	52.	53.	54.
6th	55.	56.	57.	58.	59.	60.	61.	62.	63.	64.
7th	65.	66.	67.	68.	69.	70.	71.	72.	73.	74.
8th	75.	76.	77.	78.	79.	80.	81.	82.	83.	84.
9th	85.	86.	87.	88.	89.	90.	91.	92.	93.	94.
10th	95.	96.	97.	98.	99.	100.	101.	102.	103.	104.
11th	105.	106.	107.	108.	109.	110.	111.	112.	113.	114.
12th	115.	116.	117.	118.	119.	120.	121.	122.	123.	124.
13th	125.	126.	127.	128.	129.	130.	131.	132.	133.	134.
14th	135.	136.	137.	138.	139.	140.	141.	142.	143.	144.
15th	145.	146.	147.	148.	149.	150.	151.	152.	153.	154.
16th	155.	156.	157.	158.	159.	160.	161.	162.	163.	164.
17th	165.	166.	167.	168.	169.	170.	171.	172.	173.	174.
18th	175.	176.	177.	178.	179.	180.	181.	182.	183.	184.
19th	185.	186.	187.	188.	189.	190.	191.	192.	193.	194.
20th	195.	196.	197.	198.	199.	200.	201.	202.	203.	204.

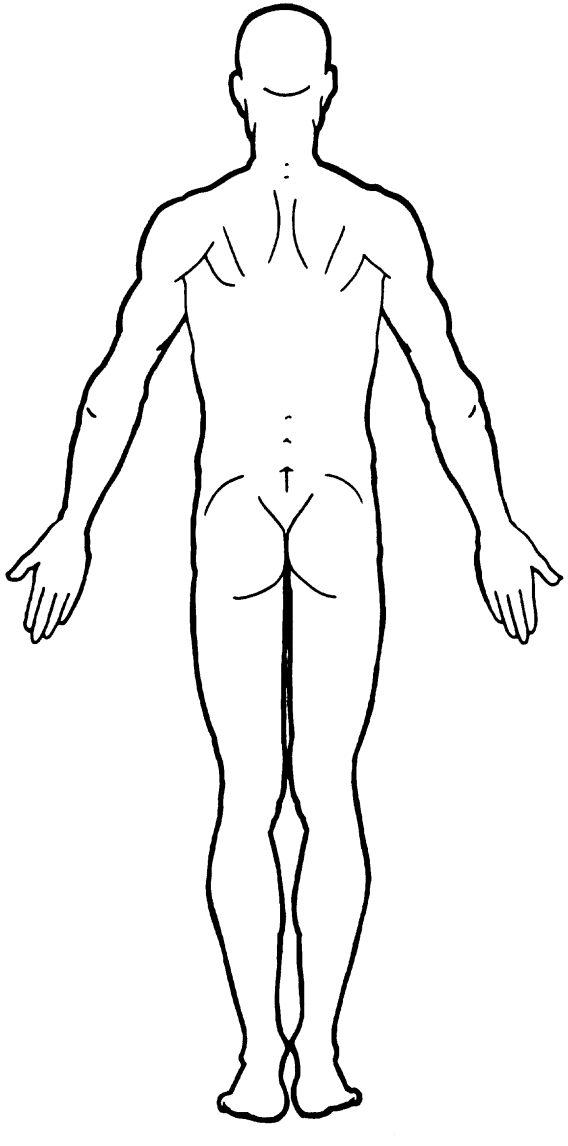
OCCUPANT INJURY DATA SUPPLEMENT

	Source of Injury Data	O.I.C. – A.I.S.					Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
		Body Region	Aspect	Lesion	System Organ	A.I.S. Severity				
21st	—	—	—	—	—	—	— —	—	—	— —
22nd	—	—	—	—	—	—	— —	—	—	— —
23rd	—	—	—	—	—	—	— —	—	—	— —
24th	—	—	—	—	—	—	— —	—	—	— —
25th	—	—	—	—	—	—	— —	—	—	— —
26th	—	—	—	—	—	—	— —	—	—	— —
27th	—	—	—	—	—	—	— —	—	—	— —
28th	—	—	—	—	—	—	— —	—	—	— —
29th	—	—	—	—	—	—	— —	—	—	— —
30th	—	—	—	—	—	—	— —	—	—	— —
31st	—	—	—	—	—	—	— —	—	—	— —
32nd	—	—	—	—	—	—	— —	—	—	— —
33rd	—	—	—	—	—	—	— —	—	—	— —
34th	—	—	—	—	—	—	— —	—	—	— —
35th	—	—	—	—	—	—	— —	—	—	— —
36th	—	—	—	—	—	—	— —	—	—	— —
37th	—	—	—	—	—	—	— —	—	—	— —
38th	—	—	—	—	—	—	— —	—	—	— —
39th	—	—	—	—	—	—	— —	—	—	— —
40th	—	—	—	—	—	—	— —	—	—	— —
41st	—	—	—	—	—	—	— —	—	—	— —
42nd	—	—	—	—	—	—	— —	—	—	— —
43rd	—	—	—	—	—	—	— —	—	—	— —
44th	—	—	—	—	—	—	— —	—	—	— —
45th	—	—	—	—	—	—	— —	—	—	— —

OFFICIAL INJURY DATA—SOFT TISSUE INJURIES

Indicate the *Location, Lesion, Detail* (size, depth, fracture type, head injury clinical signs and neurological deficits), and *Source* of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





SOURCE OF INJURY DATA

OFFICIAL

(1) Autopsy records with or without hospital medical records
(2) Hospital medical records other than emergency room (eg. discharge summary)
(3) Emergency room records only (including associated X-rays or other lab reports)
(4) Private physician, walk-in or emergency clinic

UNOFFICIAL

(5) Lay coroner report
(6) E.M.S. personnel
(7) Interviewee
(8) Other source (specify):

(9) Police

INJURY SOURCE

FRONT

(01) Windshield
(02) Mirror
(03) Sunvisor
(04) Steering wheel rim
(05) Steering wheel hub/spoke
(06) Steering wheel (combination of codes 04 and 05)
(07) Steering column, transmission selector lever, other attachment
(08) Add-on equipment (e.g., CB, tape deck, air conditioner)
(09) Left instrument panel and below
(10) Center instrument panel and below
(11) Right instrument panel and below
(12) Glove compartment door
(13) Knee bolster
(14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
(15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
(16) Other front object (specify):

LEFT SIDE

(20) Left side interior surface, excluding hardware or armrests
(21) Left side hardware or armrest
(22) Left A pillar
(23) Left B pillar
(24) Other left pillar (specify):

(25) Left side window glass or frame
(26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
(27) Other left side object (specify):

RIGHT SIDE

(30) Right side interior surface, excluding hardware or armrests
(31) Right side hardware or armrest
(32) Right A pillar
(33) Right B pillar
(34) Other right pillar (specify):

(35) Right side window glass or frame
(36) Right side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, roof side rail
(37) Other right side object (specify):

INTERIOR

(40) Seat, back support
(41) Belt restraint webbing/buckle
(42) Belt restraint B-pillar attachment point
(43) Other restraint system component (specify):

(44) Head restraint system
(45) Air cushion
(46) Other occupants (specify):

(47) Interior loose objects
(48) Child safety seat (specify):

(49) Other interior object (specify):

ROOF

(50) Front header
(51) Rear header
(52) Roof left side rail
(53) Roof right side rail
(54) Roof or convertible top

FLOOR

(56) Floor including toe pan
(57) Floor or console mounted transmission lever, including console
(58) Parking brake handle
(59) Foot controls including parking brake

REAR

(60) Backlight (rear window)
(61) Backlight storage rack, door, etc.
(62) Other rear object (specify):

EXTERIOR OF OCCUPANT'S VEHICLE

(65) Hood
(66) Outside hardware (e.g., outside mirror, antenna)
(67) Other exterior surface or tires (specify):

(68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

(70) Front bumper
(71) Hood edge
(72) Other front of vehicle (specify):

(73) Hood
(74) Hood ornament
(75) Windshield, roof rail, A-pillar
(76) Side surface
(77) Side mirrors
(78) Other side protrusions (specify):

(79) Rear surface
(80) Undercarriage
(81) Tires and wheels
(82) Other exterior of other motor vehicle (specify):

(83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

(84) Ground
(85) Other vehicle or object (specify)

(86) Unknown vehicle or object

NONCONTACT INJURY

(90) Fire in vehicle
(91) Flying glass
(92) Other noncontact injury source (specify)

(97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

(1) Certain
(2) Probable
(3) Possible
(9) Unknown

DIRECT/INDIRECT INJURY

(1) Direct contact injury
(2) Indirect contact injury
(3) Noncontact injury
(7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION

O.I.C. Body Region

(M) Abdomen
(Q) Ankle–foot
(A) Arm (upper)
(B) Back–thoracolumbar spine
(C) Chest
(E) Elbow
(F) Face
(R) Forearm
(H) Head–skull
(U) Injured, unknown region
(K) Knee
(L) Leg (lower)
(Y) Lower limb(s) (whole or unknown part)
(N) Neck–cervical spine
(P) Pelvic–hip
(S) Shoulder
(T) Thigh
(X) Upper limb(s) (whole or unknown part)
(O) Whole body
(W) Wrist–hand

Aspect of Injury

(A) Anterior–front
(B) Bilateral (rib fracture only).
(C) Central
(I) Inferior–lower
(U) Injured, unknown aspect
(L) Left
(P) Posterior–back
(R) Right
(S) Superior–upper
(W) Whole region

Lesion

(A) Abrasion
(M) Amputation
(V) Avulsion
(B) Burn
(K) Concussion
(C) Contusion
(N) Crush
(G) Detachment, separation
(D) Dislocation
(F) Fracture
(Z) Fracture and dislocation
(U) Injured, unknown lesion
(L) Laceration
(O) Other
(P) Perforation, puncture
(R) Rupture
(S) Sprain
(T) Strain
(E) Total severance, transection

System/Organ

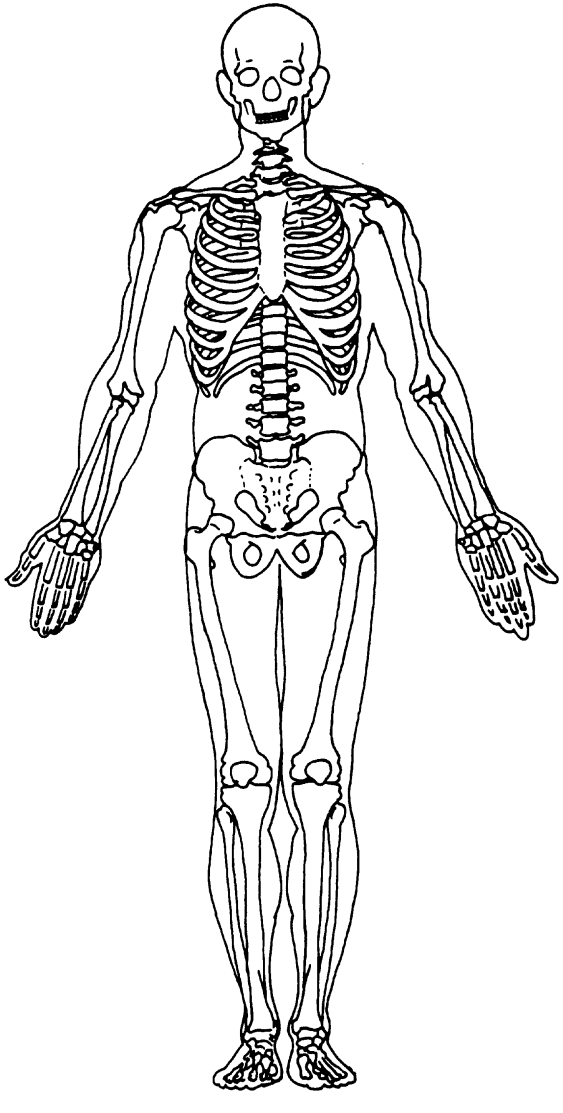
(W) All systems in region
(A) Arteries–veins
(B) Brain
(D) Digestive
(E) Ears
(O) Eye
(H) Heart
(U) Injured, unknown system
(I) Integumentary
(J) Joints
(K) Kidneys
(L) Liver
(M) Muscles
(N) Nervous system
(P) Pulmonary–lungs
(R) Respiratory
(S) Skeletal
(C) Spinal cord
(Q) Spleen
(T) Thyroid, other endocrine gland
(G) Urogenital
(V) Vertebrae

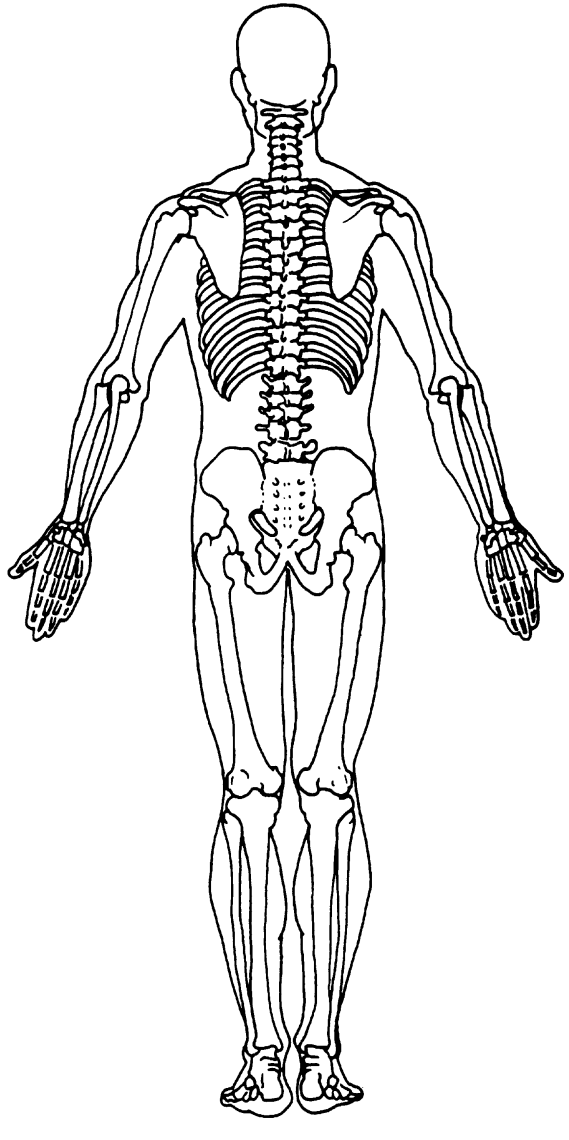
Abbreviated Injury Scale

(1) Minor injury
(2) Moderate injury
(3) Serious injury
(4) Severe injury
(5) Critical injury
(6) Maximum (untreatable)
(7) Injured, unknown severity

OFFICIAL INJURY DATA – SKELETAL INJURIES

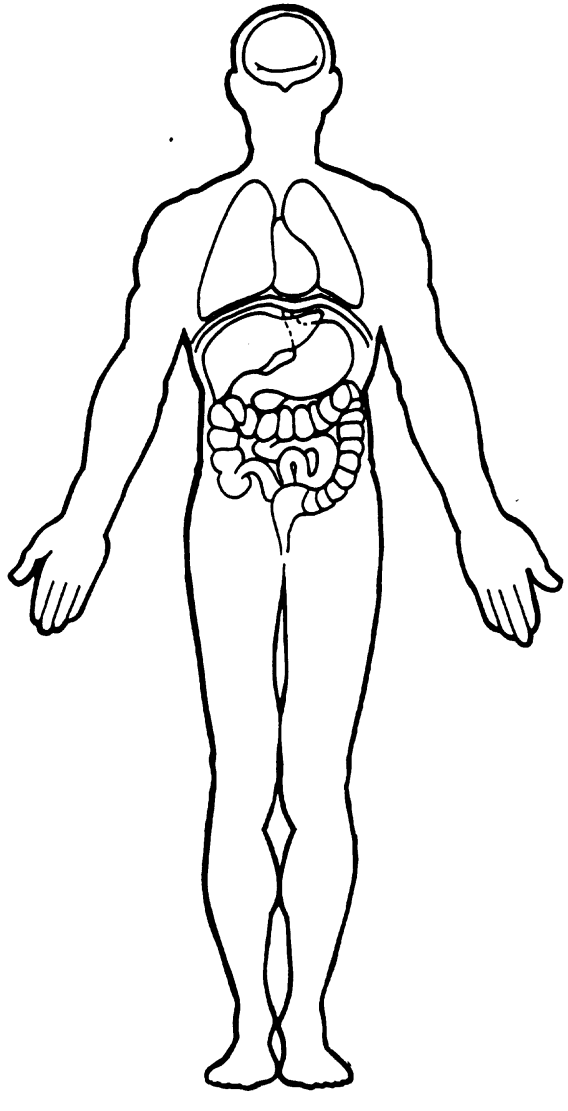
Indicate the *Location, Lesion, Detail* (size, depth, fracture type, head injury clinical signs and neurological deficits), and *Source* of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

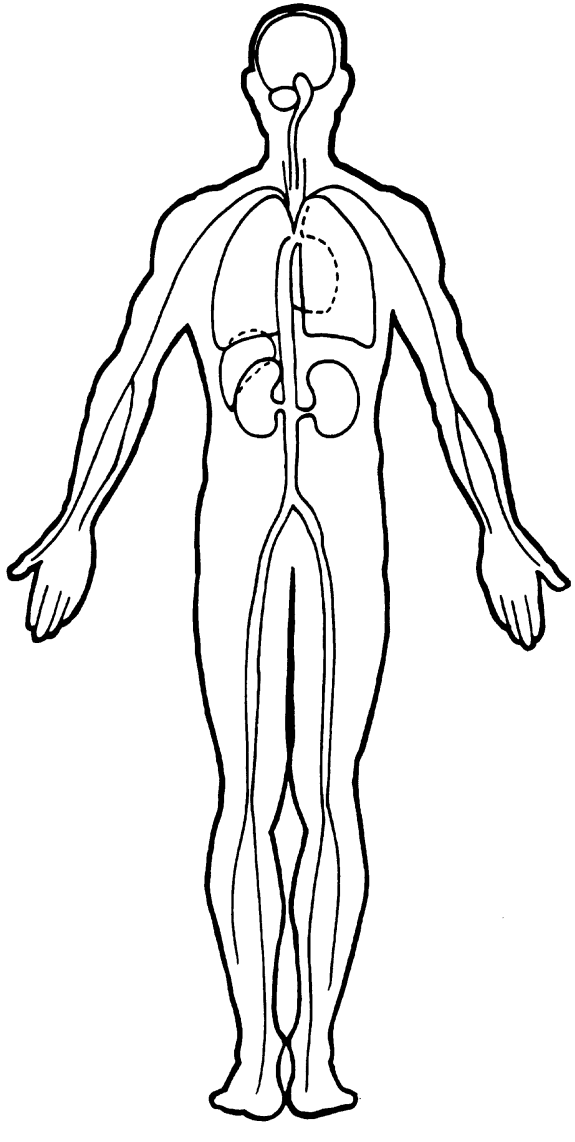




OFFICIAL INJURY DATA—INTERNAL INJURIES

Indicate the *Location, Lesion, Detail* (size, depth, fracture type, head injury clinical signs and neurological deficits), and *Source* of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





U.S. Department of Transportation
National Highway Traffic Safety Administration

UPDATE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 45
2. Case Number – Stratum: 121 1F
3. Vehicle Number: 01
4. Occupant Number: 02

RECEIVED [redacted] 1989

Driver or Occupant Name: _____

Address: _____

Other Information: _____

(Sanitize this section prior to Update submission.)

INJURY DATA CODED ON INITIAL SUBMISSION

	Source of Injury Data	O.I.C.–A.I.S. Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
1st	5. 7	6. F	7. S	8. C	9. I	10. 1	11. 61	12. 1	13. 1	14. 00
2nd	15. 7	16. K	17. R	18. C	19. I	20. 1	21. 11	22. 1	23. 1	24. 00
3rd	25. 7	26. K	27. L	28. C	29. I	30. 1	31. 10	32. 1	33. 1	34. 00
4th	35.	36.	37.	38.	39.	40.	41.	42.	43.	44.
5th	45.	46.	47.	48.	49.	50.	51.	52.	53.	54.
6th	55.	56.	57.	58.	59.	60.	61.	62.	63.	64.
7th	65.	66.	67.	68.	69.	70.	71.	72.	73.	74.
8th	75.	76.	77.	78.	79.	80.	81.	82.	83.	84.
9th	85.	86.	87.	88.	89.	90.	91.	92.	93.	94.
10th	95.	96.	97.	98.	99.	100.	101.	102.	103.	104.

NOTE: If necessary, keep copy of original Occupant Injury form and submit as part of update.

UPDATED CASE INFORMATION

	INITIAL SUBMISSION	FINAL
GV12. Alcohol Test Results for Driver	96	96
OA05. Occupant's Age	70	70
OA06. Occupant's Sex	2	2
OA07. Occupant's Height	66	66
OA08. Occupant's Weight	187	187
OA17. Manual (Active) Belt System Availability	3	3
OA18. Manual (Active) Belt System Use	00	00
OA21. Automatic (Passive) Restraint System Availability	0	0
OA22. Automatic (Passive) Restraint Function	0	0

	INITIAL SUBMISSION	FINAL
OA35. Treatment – Mortality	4	4
OA36. Type of Medical Facility (for Initial Treatment)	1	1
OA37. Hospital Stay	00	00
OA38. Working Days Lost	97	97
OA39. Time to Death	00	00
OA40. 1st Medically Reported Cause of Death	00	00
OA41. 2nd Medically Reported Cause of Death	00	00
OA42. 3rd Medically Reported Cause of Death	00	00
OA43. Number of Recorded Injuries for This Occupant	03	05

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the unofficial and official sources prior to initial case submission **and from subsequently** acquired medical data. Remember not to double count an injury just because it was identified from two different sources.

	Source of Injury Data	O.I.C. – A.I.S. Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
1st	5. 3	6. F	7. S	8. C	9. I	10. 1	11. 01	12. 1	13. 1	14. 00
2nd	15. 3	16. K	17. R	18. C	19. I	20. 1	21. 11	22. 1	23. 1	24. 00
3rd	25. 3	26. K	27. L	28. C	29. I	30. 1	31. 10	32. 1	33. 1	34. 00
4th	35. 3	36. K	37. R	38. A	39. I	40. 1	41. 11	42. 1	43. 1	44. 00
5th	45. 3	46. K	47. L	48. A	49. I	50. 1	51. 10	52. 1	53. 1	54. 00
6th	55.	56.	57.	58.	59.	60.	61.	62.	63.	64.
7th	65.	66.	67.	68.	69.	70.	71.	72.	73.	74.
8th	75.	76.	77.	78.	79.	80.	81.	82.	83.	84.
9th	85.	86.	87.	88.	89.	90.	91.	92.	93.	94.
10th	95.	96.	97.	98.	99.	100.	101.	102.	103.	104.
11th	105.	106.	107.	108.	109.	110.	111.	112.	113.	114.
12th	115.	116.	117.	118.	119.	120.	121.	122.	123.	124.
13th	125.	126.	127.	128.	129.	130.	131.	132.	133.	134.
14th	135.	136.	137.	138.	139.	140.	141.	142.	143.	144.
15th	145.	146.	147.	148.	149.	150.	151.	152.	153.	154.
16th	155.	156.	157.	158.	159.	160.	161.	162.	163.	164.
17th	165.	166.	167.	168.	169.	170.	171.	172.	173.	174.
18th	175.	176.	177.	178.	179.	180.	181.	182.	183.	184.
19th	185.	186.	187.	188.	189.	190.	191.	192.	193.	194.
20th	195.	196.	197.	198.	199.	200.	201.	202.	203.	204.

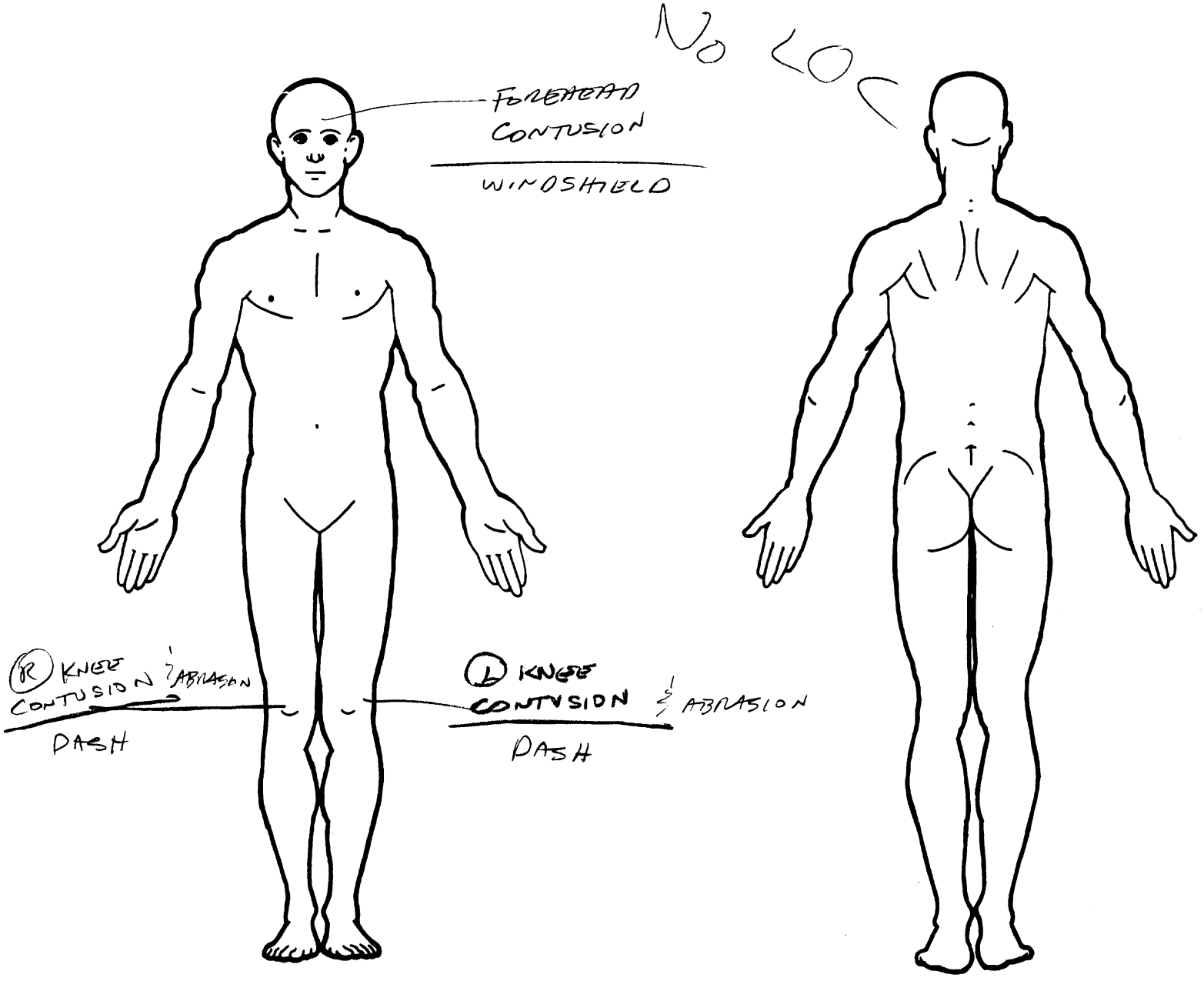
If greater than 20 injuries, code additional on Occupant Injury Data Supplement.

OCCUPANT INJURY DATA SUPPLEMENT

	Source of Injury Data	O.I.C. – A.I.S. Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
21st										
22nd										
23rd										
24th										
25th										
26th										
27th										
28th										
29th										
30th										
31st										
32nd										
33rd										
34th										
35th										
36th										
37th										
38th										
39th										
40th										
41st										
42nd										
43rd										
44th										
45th										

OFFICIAL INJURY DATA – SOFT TISSUE INJURIES

Indicate the *Location, Lesion, Detail* (size, depth, fracture type, head injury clinical signs and neurological deficits), and *Source* of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



SOURCE OF INJURY DATA

OFFICIAL

(1) Autopsy records with or without hospital medical records
(2) Hospital medical records other than emergency room (eg. discharge summary)
(3) Emergency room records only (including associated X-rays or other lab reports)
(4) Private physician, walk-in or emergency clinic

UNOFFICIAL

(5) Lay coroner report
(6) E.M.S. personnel
(7) Interviewee
(8) Other source (specify):

(9) Police

INJURY SOURCE

FRONT

(01) Windshield
(02) Mirror
(03) Sunvisor
(04) Steering wheel rim
(05) Steering wheel hub/spoke
(06) Steering wheel (combination of codes 04 and 05)
(07) Steering column, transmission selector lever, other attachment
(08) Add-on equipment (e.g., CB, tape deck, air conditioner)
(09) Left instrument panel and below
(10) Center instrument panel and below
(11) Right instrument panel and below
(12) Glove compartment door
(13) Knee bolster
(14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
(15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
(16) Other front object (specify):

LEFT SIDE

(20) Left side interior surface, excluding hardware or armrests
(21) Left side hardware or armrest
(22) Left A pillar
(23) Left B pillar
(24) Other left pillar (specify):

(25) Left side window glass or frame
(26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
(27) Other left side object (specify):

RIGHT SIDE

(30) Right side interior surface, excluding hardware or armrests
(31) Right side hardware or armrest
(32) Right A pillar
(33) Right B pillar
(34) Other right pillar (specify):

(35) Right side window glass or frame
(36) Right side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, roof side rail
(37) Other right side object (specify):

INTERIOR

(40) Seat, back support
(41) Belt restraint webbing/buckle
(42) Belt restraint B-pillar attachment point
(43) Other restraint system component (specify):

(44) Head restraint system
(45) Air cushion
(46) Other occupants (specify):

(47) Interior loose objects
(48) Child safety seat (specify):

(49) Other interior object (specify):

ROOF

(50) Front header
(51) Rear header
(52) Roof left side rail
(53) Roof right side rail
(54) Roof or convertible top

FLOOR

(56) Floor including toe pan
(57) Floor or console mounted transmission lever, including console
(58) Parking brake handle
(59) Foot controls including parking brake

REAR

(60) Backlight (rear window)
(61) Backlight storage rack, door, etc.
(62) Other rear object (specify):

EXTERIOR OF OCCUPANT'S VEHICLE

(65) Hood
(66) Outside hardware (e.g., outside mirror, antenna)
(67) Other exterior surface or tires (specify):

(68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

(70) Front bumper
(71) Hood edge
(72) Other front of vehicle (specify):

(73) Hood
(74) Hood ornament
(75) Windshield, roof rail, A-pillar
(76) Side surface
(77) Side mirrors
(78) Other side protrusions (specify):

(79) Rear surface
(80) Undercarriage
(81) Tires and wheels
(82) Other exterior of other motor vehicle (specify):

(83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

(84) Ground
(85) Other vehicle or object (specify)

(86) Unknown vehicle or object

NONCONTACT INJURY

(90) Fire in vehicle
(91) Flying glass
(92) Other noncontact injury source (specify)

(97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

(1) Certain
(2) Probable
(3) Possible
(9) Unknown

DIRECT/INDIRECT INJURY

(1) Direct contact injury
(2) Indirect contact injury
(3) Noncontact injury
(7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION

O.I.C. Body Region

(M) Abdomen
(Q) Ankle–foot
(A) Arm (upper)
(B) Back–thoracolumbar spine
(C) Chest
(E) Elbow
(F) Face
(R) Forearm
(H) Head–skull
(U) Injured, unknown region
(K) Knee
(L) Leg (lower)
(Y) Lower limb(s) (whole or unknown part)
(N) Neck–cervical spine
(P) Pelvic–hip
(S) Shoulder
(T) Thigh
(X) Upper limb(s) (whole or unknown part)
(O) Whole body
(W) Wrist–hand

Aspect of Injury

(A) Anterior–front
(B) Bilateral (rib fracture only).
(C) Central
(I) Inferior–lower
(U) Injured, unknown aspect
(L) Left
(P) Posterior–back
(R) Right
(S) Superior–upper
(W) Whole region

Lesion

(A) Abrasion
(M) Amputation
(V) Avulsion
(B) Burn
(K) Concussion
(C) Contusion
(N) Crush
(G) Detachment, separation
(D) Dislocation
(F) Fracture
(Z) Fracture and dislocation
(U) Injured, unknown lesion
(L) Laceration
(O) Other
(P) Perforation, puncture
(R) Rupture
(S) Sprain
(T) Strain
(E) Total severance, transection

System/Organ

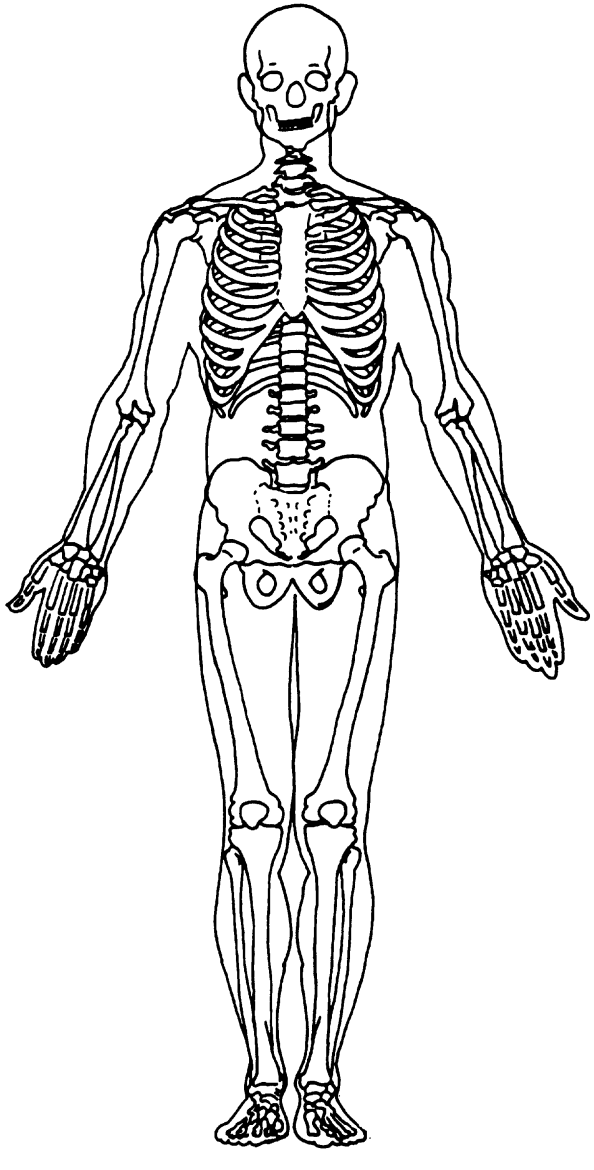
(W) All systems in region
(A) Arteries–veins
(B) Brain
(D) Digestive
(E) Ears
(O) Eye
(H) Heart
(U) Injured, unknown system
(I) Integumentary
(J) Joints
(K) Kidneys
(L) Liver
(M) Muscles
(N) Nervous system
(P) Pulmonary–lungs
(R) Respiratory
(S) Skeletal
(C) Spinal cord
(Q) Spleen
(T) Thyroid, other endocrine gland
(G) Urogenital
(V) Vertebrae

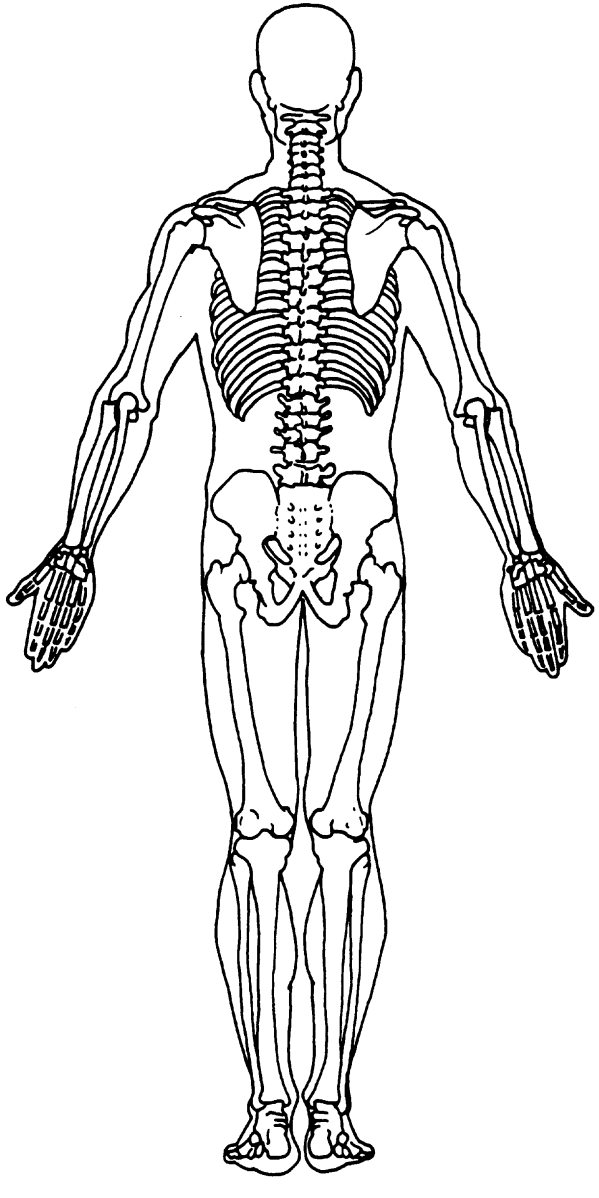
Abbreviated Injury Scale

(1) Minor injury
(2) Moderate injury
(3) Serious injury
(4) Severe injury
(5) Critical injury
(6) Maximum (untreatable)
(7) Injured, unknown severity

OFFICIAL INJURY DATA – SKELETAL INJURIES

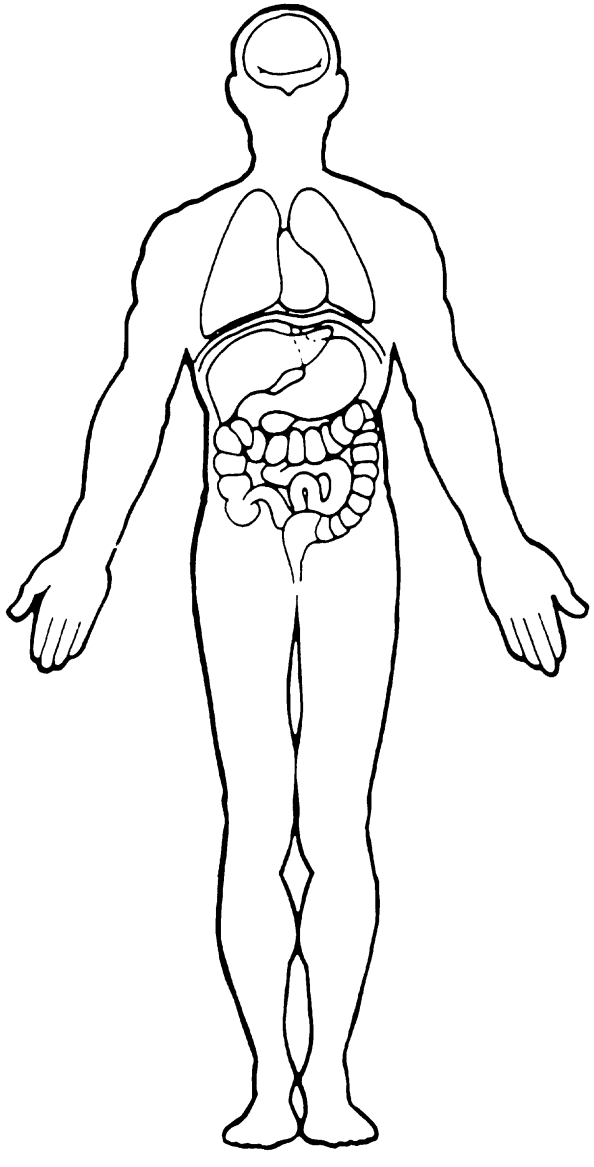
Indicate the *Location, Lesion, Detail* (size, depth, fracture type, head injury clinical signs and neurological deficits), and *Source* of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

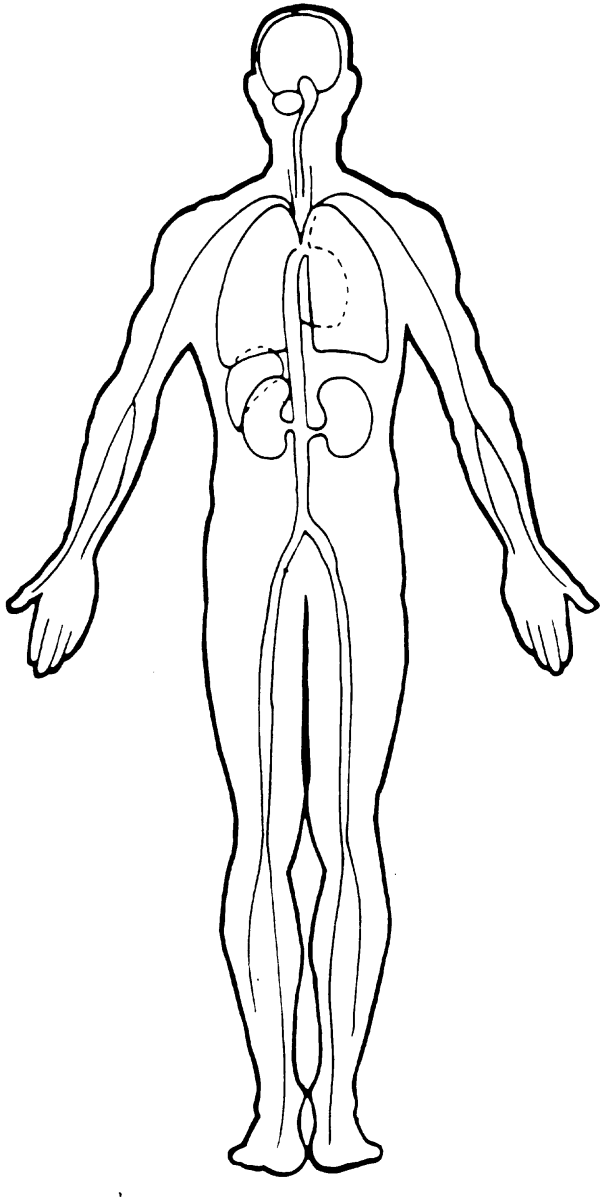




OFFICIAL INJURY DATA – INTERNAL INJURIES

Indicate the *Location*, *Lesion*, *Detail* (size, depth, fracture type, head injury clinical signs and neurological deficits), and *Source* of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





U.S. Department of Transportation
National Highway Traffic Safety Administration

EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 45	3. Vehicle Number: 02
2. Case Number–Stratum: 121 F	

VEHICLE IDENTIFICATION

VIN: 1FABP33SXHK[redacted] Model Year: 1987

Vehicle Make (specify): FORD Vehicle Model (specify): TEMPO

LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	BEGINS 4" FROM R.R. CORNER	ENTIRE REAR BUMPER
2	ENTIRE FRONT BUMPER	ENTIRE FRONT BUMPER

CRUSH PROFILE

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush.

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of C-Measurements	Direct Damage: Width (CDC)	Direct Damage: Max Crush	Field L	C_1	C_2	C_3	C_4	C_5	C_6	±D
1	REAR BUMPER	57.0		57.5	21.5	22.0	17.7	13.5	10.0	7.0	0
1	FREE SPACE				1.7	.3	.1	.1	.3	1.7	0
1	C-MEA		25.8		25.8	21.7	17.6	13.4	9.7	5.3	0
2	FRONT BUMPER			56.0	5.4	4.0	2.9	2.8	3.5	3.5	0
2	FREE SPACE				3.8	1.0	.4	.4	1.0	3.8	0
2	C-MEA				1.6	3.0	2.5	2.4	2.5	0	0
2	ABOVE TO GRILL			56.0	15.2	17.4	16.7	17.0	18.0	15.0	0
2	FREE SPACE				11.8	9.0	8.4	8.4	9.0	11.8	0
2	C-MEA				3.4	8.4	8.3	8.6	9.0	3.2	0
2	AVG C-MEA		5.8	56.0	1.6	5.7	5.4	5.5	5.8	3.8	0

HS Form 435A
1/89

UNABLE TO SHOW SLIDES TO GRILL DUE TO OTHER VEHICLE MEASUREMENTS DONE BY HAND, HOWEVER, THEY ARE ACCURATE

VEHICLE DAMAGE SKETCH

TIRE – WHEEL DAMAGE

	a. Rotation physically restricted	b. Tire deflated
RF	2	2
LF	2	2
RR	1	1
LR	1	2

(1) Yes (2) No (8) NA (9) Unk.

TYPE OF TRANSMISSION

☐ Manual ☒ Automatic

ORIGINAL SPECIFICATIONS

Wheelbase	99.9
Overall Length	176.5
Maximum Width	66.3
Curb Weight	2462
Average Track	52.5
Front Overhang	N/A
Rear Overhang	N/A
Engine Size: cyl./ displ.	2.3L 4CYL
Undeformed End Width	57.0 F / 61.0 R

WHEEL STEER ANGLES

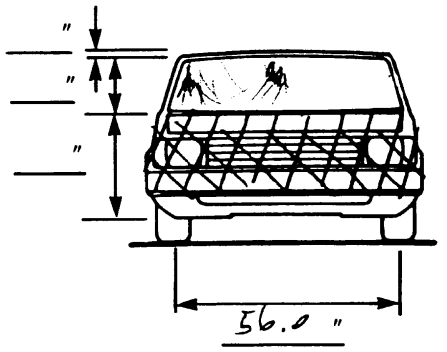
(For locked front wheels or displaced rear axles only)

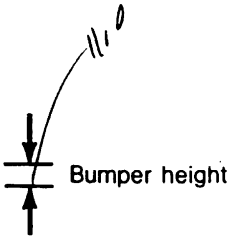
RF ± ___ ___ °
LF ± ___ ___ °
RR ± 0 . ___ °
LR ± 4 5 °
Within ±5 degrees

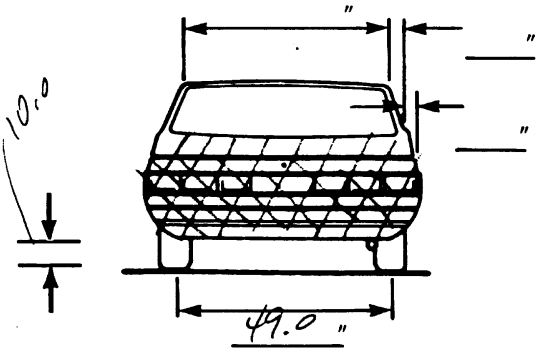
DRIVE WHEELS

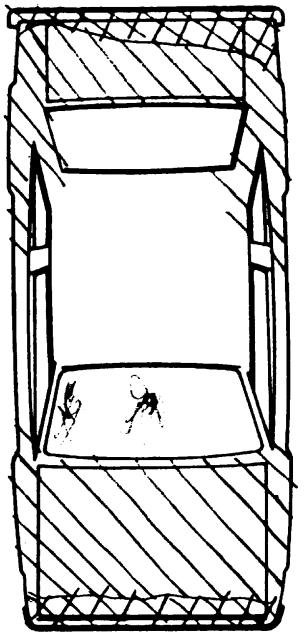
☒ FWD ☐ RWD ☐ 4WD

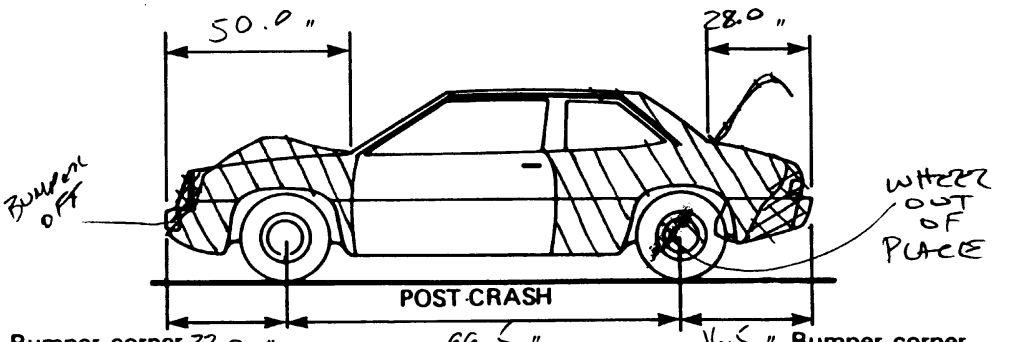
Approximate Cargo Weight 0

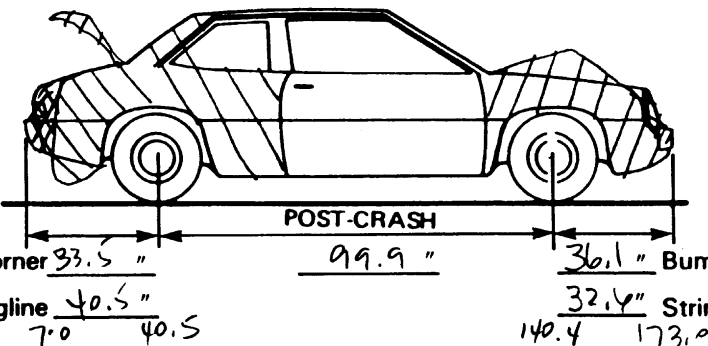












NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewall, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.
Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

01-30—Vehicle Number

Noncollision
- (31) Overturn—rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify): _____
- (35) Noncollision injury
- (38) Other noncollision (specify): _____
- (39) Noncollision—details unknown

Collision with Fixed Object
- (41) Tree (≤4 inches in diameter)
- (42) Tree (>4 inches in diameter)
- (43) Shrubbery or bush
- (44) Embankment
- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post
- (50) Pole or post (≤4 inches in diameter)
- (51) Pole or post (>4 but ≤12 inches in diameter)
- (52) Pole or post (>12 inches in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (specify): _____
- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or Culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): _____
- (69) Unknown fixed object

Collision With Nonfixed Object
- (71) Motor vehicle not in transport
- (72) Pedestrian
- (73) Cyclist or cycle
- (74) Other nonmotorist or conveyance (specify): _____
- (75) Vehicle occupant
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (88) Other nonfixed object (specify): _____
- (89) Unknown nonfixed object

- (98) Other event (specify): _____
- (99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
01	01	180	00	B	D	E	W	05
02	03	000	00	F	D	E	W	01

U.S. Department of Transportation
National Highway Traffic Safety Administration

INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 45
2. Case Number–Stratum: 121F
3. Vehicle Number: 02

INTEGRITY

4. Passenger Compartment Integrity 06

(00) No integrity loss

Yes, Integrity Was Lost Through
(01) Windshield
(02) Door (side)
(03) Door/hatch (rear)
(04) Roof
(05) Roof glass
(06) Side window
(07) Rear window
(08) Roof and roof glass
(09) Windshield and door (side)
(10) Windshield and roof
(11) Side and rear window
(98) Other combination of above (specify): _____
(99) Unknown

Door, Tailgate Or Hatch Opening

5. LF 1 6. RF 1 7. LR 0 8. RR 0 9. TG/H 0

(0) No door/gate/hatch
(1) Door/gate/hatch remained closed and operational
(2) Door/gate/hatch came open during collision
(3) Door/gate/hatch jammed shut
(8) Other (specify): _____
(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then Code 0.

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate, or Hatch Came Open During Collision
(1) Door operational (no damage)
(2) Latch/striker failure due to damage
(3) Hinge failure due to damage
(4) Door structure failure due to damage
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
(6) Latch/striker and hinge failure due to damage
(8) Other failure (specify): _____
(9) Unknown

GLAZING

Glazing Damage from Impact Forces

15. WS 2 16. LF 0 17. RF 0 18. LR 6 19. RR 0
20. BL 0 21. Roof 8 22. Other 8

(0) No glazing damage from impact forces
(2) Glazing in place and cracked from impact forces
(3) Glazing in place and holed from impact forces
(4) Glazing out-of-place (cracked or not) and not holed from impact forces
(5) Glazing out-of-place and holed from impact forces
(6) Glazing disintegrated from impact forces
(7) Glazing removed prior to accident
(8) No glazing
(9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS 2 24. LF 0 25. RF 0 26. LR 0 27. RR 0
28. BL 0 29. Roof 0 30. Other 0

(0) No occupant contact to glazing or no glazing
(1) Glazing contacted by occupant but no glazing damage
(2) Glazing in place and cracked by occupant contact
(3) Glazing in place and holed by occupant contact
(4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
(5) Glazing out-of-place by occupant contact and holed by occupant contact
(6) Glazing disintegrated by occupant contact
(9) Unknown if contacted by occupant

If No Glazing Damage ***And*** No Occupant Contact or No Glazing, Then Code IV 31 Through IV 46 As 0

Type of Window/Windshield Glazing

31. WS 1 32. LF 0 33. RF 0 34. LR 2 35. RR 0
36. BL 0 37. Roof 0 38. Other 0

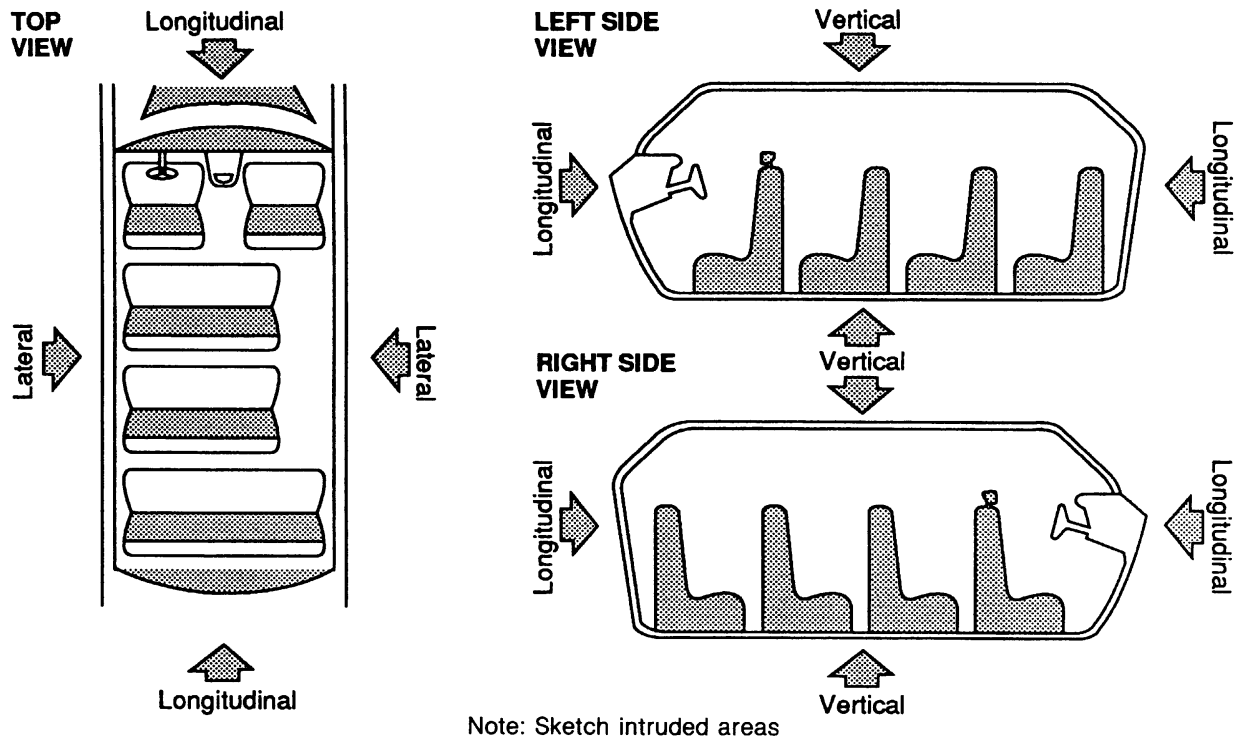
(0) No glazing contact and no damage, or no glazing
(1) AS-1 – Laminated
(2) AS-2 – Tempered
(3) AS-3 – Tempered-tinted
(4) AS-14 – Glass/Plastic
(8) Other (specify): _____
(9) Unknown

Window Precrash Glazing Status

39. WS 1 40. LF 0 41. RF 0 42. LR 1 43. RR 0
44. BL 0 45. Roof 0 46. Other 0

(0) No glazing contact and no damage, or no glazing
(1) Fixed
(2) Closed
(3) Partially opened
(4) Fully opened
(9) Unknown

INTRUSION WORK SHEET



Note: Sketch intruded areas

LOCATION OF INTRUSION	INTRUDED COMPONENT	COMPARISION VALUE	–	INTRUDED VALUE	=	INTRUSION	DOMINANT CRUSH DIRECTION	
21	19) SEAT BACK	6.0	–	17.0	=	11.0	2	3
23	19) " "	6.0	–	20.0	=	14.0	2	1
22	19) " "	6.0	–	20.0	=	14.0	2	2
21	20) " "	0	–	4.5	=	4.5	2	4
22	20) " "	0	–	4.5	=	4.5	2	5
23	20) " "	0	–	4.5	=	4.5	2	6
11	24) CUSHION	8.0	–	11.5	=	3.5	1	7
~~13~~	~~24 "~~	~~8.0~~	~~–~~	~~8.0~~	~~=~~	~~0~~	~~1~~	
~~11~~	02) INS. LEFT	0	–	.8	=	.8	2	
			–		=			
			–		=			
			–		=			
			–		=			
			–		=			
			–		=			

Document no more than the 15 most severe intrusions

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV 47-IV 86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. 23	48. 19	49. 4	50. 2
2nd	51. 22	52. 19	53. 4	54. 2
3rd	55. 21	56. 19	57. 3	58. 2
4th	59. 21	60. 20	61. 2	62. 2
5th	63. 22	64. 20	65. 2	66. 2
6th	67. 23	68. 20	69. 2	70. 2
7th	71. 11	72. 24	73. 2	74. 1
8th	75.	76.	77.	78.
9th	79.	80.	81.	82.
10th	83.	84.	85.	86.

LOCATION OF INTRUSION

Front Seat
- (11) Left
- (12) Middle
- (13) Right

Second Seat
- (21) Left
- (22) Middle
- (23) Right

Third Seat
- (31) Left
- (32) Middle
- (33) Right

Fourth Seat
- (41) Left
- (42) Middle
- (43) Right

(98) Other enclosed area (specify): _____

(99) Unknown

INTRUDING COMPONENT

Interior Components
- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back panel or door surface
- (26) Other interior component (specify): _____
- (27) Side panel - forward of the A-pillar
- (28) Side panel - rear of the A-pillar

Exterior Components
- (30) Hood
- (31) Outside surface of vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object

(98) Intrusion of unlisted component(s) (specify): _____

(99) Unknown

MAGNITUDE OF INTRUSION

- (1) ≥ 1 inch but < 3 inches
- (2) ≥ 3 inches but < 6 inches
- (3) ≥ 6 inches but < 12 inches
- (4) ≥ 12 inches but < 18 inches
- (5) ≥ 18 inches but < 24 inches
- (6) ≥ 24 inches
- (9) Unknown

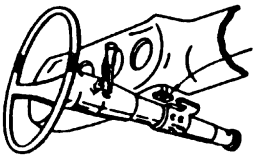
DOMINANT CRUSH DIRECTION

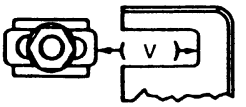
- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (9) Unknown

STEERING COLUMN WORKING DIAGRAMS

STEERING COLUMN COLLAPSE

Steering Column Shear Module Movement

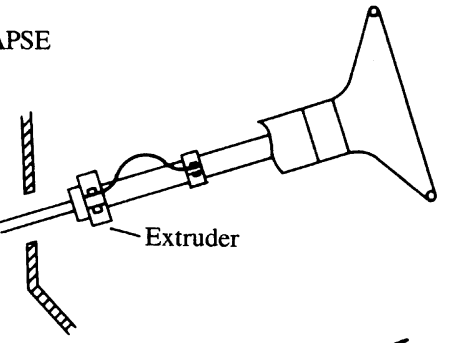




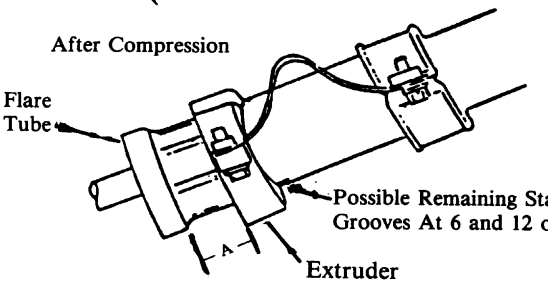
Left ___

Right ___ V = _____"

Direction and Magnitude of Steering Column Movement



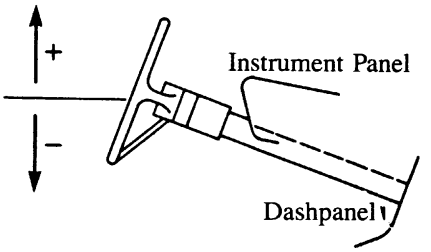
After Compression



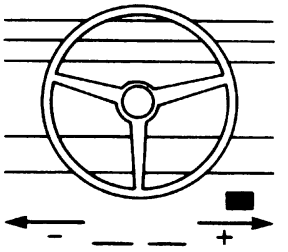
Compression = Measurement A A =_____

STEERING COLUMN MOVEMENT

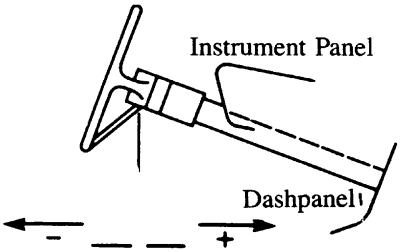
Vertical Movement



Lateral Movement



Longitudinal Movement



	COMPARISON VALUE — DAMAGED VALUE = MOVEMENT
VERTICAL	— =
LATERAL	— =
LONGITUDINAL	— =

STEERING RIM/SPOKE DEFORMATION

COMPARISON VALUE — DAMAGED VALUE = DEFORMATION
— =
— =

STEERING COLUMN

87. Steering Column Type 1
(1) Fixed column
(2) Tilt column
(3) Telescoping column
(4) Tilt and telescoping column
(8) Other column type (specify):
_____
(9) Unknown

If PDOF ≠ 11, 12 or 1, Then Code IV88-IV91 As 96

88. Steering Column Collapse Due to Occupant Loading 96
_____ Code actual measured movement to the nearest inch. See coding manual for measurement technique(s). 00
(00) No movement, compression, or collapse
(01-49) Actual measured value
(50) 50 inches or greater

Estimated movement from observation
(81) Less than 1 inch
(82) ≥ 1 inch but < 2 inches
(83) ≥ 2 inches but < 4 inches
(84) ≥ 4 inches but < 6 inches
(85) ≥ 6 inches but < 8 inches
(86) Greater than or equal to 8 inches
(96) Not assessed (PDOF ≠ 11, 12, 1)
(97) Apparent movement, value undetermined or cannot be measured or estimated
(98) Nonspecified type column
(99) Unknown

SECONDARY

Direction And Magnitude of Steering Column Movement

89. Vertical Movement 00 + – 96

90. Lateral Movement 00 + – 96

91. Longitudinal Movement 00 + – 96

Code the actual measured movement to the nearest inch. See Coding Manual for measurement technique(s)
(+00) No Steering column movement
(±01 – ±49) Actual measured value
(±50) 50 inches or greater

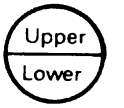
Estimated movement from observation
(±81) ≥ 1 inch but < 3 inches
(±82) ≥ 3 inches but < 6 inches
(±83) ≥ 6 inches but < 12 inches
(±84) ≥ 12 inches
(__96) Not assessed (PDOF ≠ 11, 12, 1)
(__97) Apparent movement > 1 inch but cannot be measured or estimated
(__99) Unknown

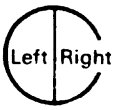
92. Steering Rim/Spoke Deformation 0
_____ Code actual measured deformation to the nearest inch.
(0) No steering rim deformation
(1-5) Actual measured value
(6) 6 inches or more
(8) Observed deformation cannot be measured
(9) Unknown

93. Location of Steering Rim/Spoke Deformation 00
(00) No steering rim deformation

Quarter Sections
(01) Section A
(02) Section B
(03) Section C
(04) Section D

Half Sections
(05) Upper half of rim/spoke
(06) Lower half of rim/spoke
(07) Left half of rim/spoke
(08) Right half of rim/spoke





(09) Complete steering wheel collapse
(10) Undetermined location
(99) Unknown

INSTRUMENT PANEL

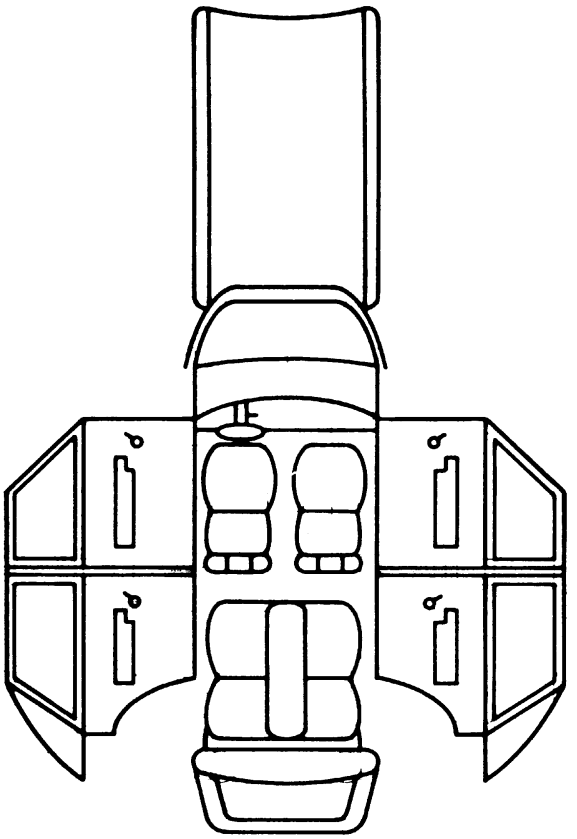
94. Odometer Reading 045,000
44634 miles – Code mileage to the nearest 1,000 miles
(000) No odometer
(001) Less than 1,500 miles
(300) 299,500 miles or more
(999) Unknown
Source: [redacted]

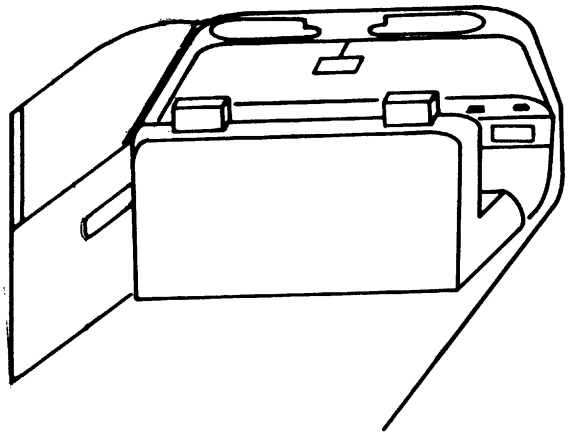
95. Instrument Panel Damage from Occupant Contact 1
(0) No
(1) Yes
(9) Unknown

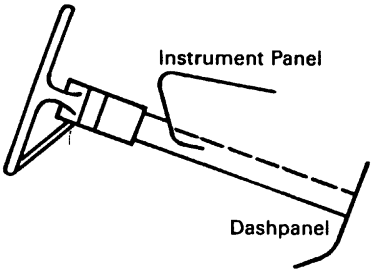
96. Knee Bolsters Deformed from Occupant Contact 8
(0) No
(1) Yes
(8) Not present
(9) Unknown

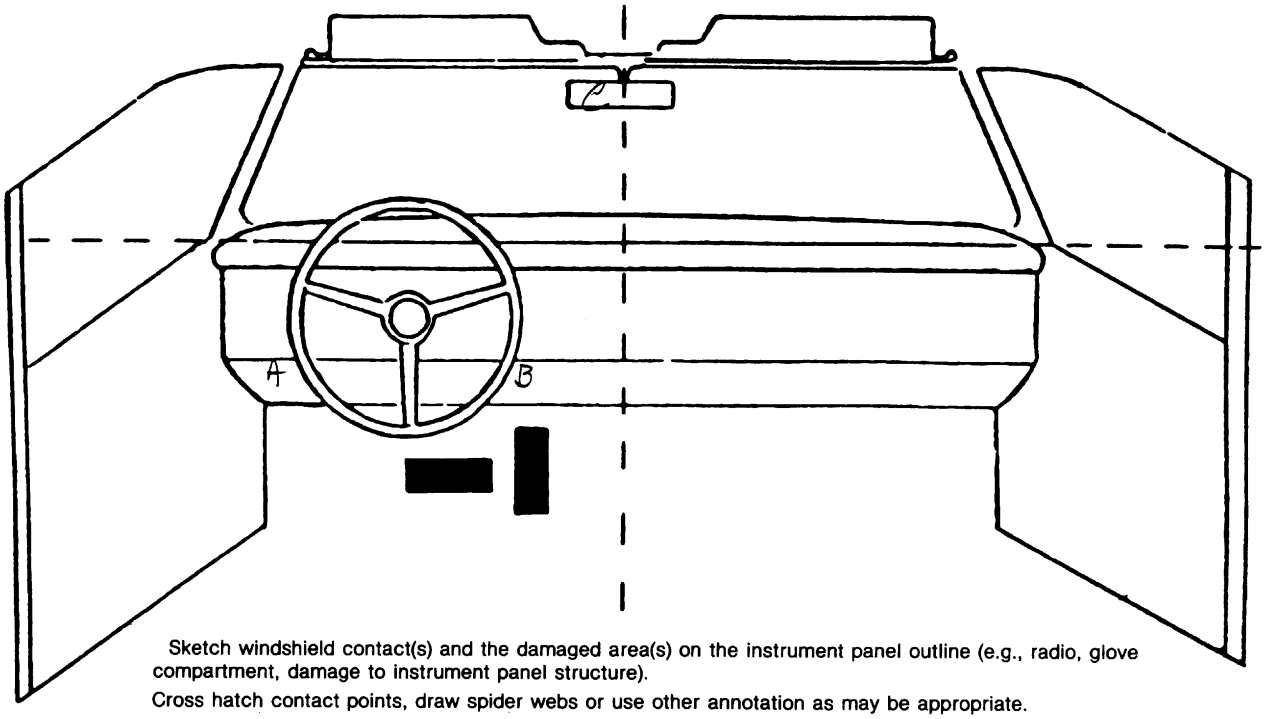
97. Did Glove Compartment Door Open During Collision(s) 0
(0) No
(1) Yes
(8) Not present
(9) Unknown

VEHICLE INTERIOR SKETCHES









Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	09	1	L. KNEE	SMUDGES	2
B	10	1	R. KNEE	"	2
C	02	1	HEAD	BROKEN OFF	2
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT
- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror,or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify): _____

LEFT SIDE
- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify): _____
- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
- (27) Other left side object (specify): _____

RIGHT SIDE
- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify): _____
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
- (37) Other right side object (specify): _____

INTERIOR
- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): _____
- (44) Head restraint system
- (45) Air cushion
- (46) Other occupants (specify): _____
- (47) Interior loose objects
- (48) Child safety seat (specify): _____
- (49) Other interior object (specify): _____

ROOF
- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR
- (56) Floor including toe pan
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR
- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

CONFIDENCE LEVEL OF CONTACT POINT
- (1) Certain
- (2) Probable
- (3) Possible
- (4) Unknown

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attributes for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Availability			
	Function			
	Failure			

Automatic (Passive) Restraint System Availability

(0) Not equipped/not available
(1) Airbag
(2) Airbag disconnected (specify):

_____

(3) Airbag not reinstalled
(4) 2 point automatic belts
(5) 3 point automatic belts
(6) Automatic belts destroyed or rendered inoperative
(9) Unknown

Automatic (Passive) Restraint Function

(0) Not equipped/not available

Automatic Belt
(1) Automatic belt in use
(2) Automatic belt not in use
(3) Automatic belt use unknown

Air Bag
(4) Airbag deployed during accident
(5) Airbag deployed inadvertently just prior to accident
(6) Deployed, accident sequence undetermined
(7) Nondeployed
(8) Unknown if deployed
(9) Unknown

Did Automatic (Passive) Restraint Fail

(0) Not equipped/not available
(1) No
(2) Yes (specify): _____
(9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data **for each seat position** in the vehicle. The attributes for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	0	4
	Use	00	00	00
	Failure Modes	0	0	0
SECOND	Availability	3	3	3
	Use	00	00	00
	Failure Modes	0	0	0
THIRD	Availability			
	Use			
	Failure Modes			
OTHER	Availability			
	Use			
	Failure Modes			

Manual (Active) Belt System Availability

(0) Not available
(1) Belt removed/destroyed
(2) Shoulder belt
(3) Lap belt
(4) Lap and shoulder belt
(5) Belt available – type unknown
(8) Other belt (specify):

_____

(9) Unknown

Manual (Active) Belt System Use

(00) None used, not available, or belt removed/destroyed
(01) Inoperative (specify):

_____

(02) Shoulder belt
(03) Lap belt
(04) Lap and shoulder belt
(05) Belt used – type unknown

_____

(08) Other belt used (specify):

_____

(12) Shoulder belt used with child safety seat
(13) Lap belt used with child safety seat
(14) Lap and shoulder belt used with child safety seat
(15) Belt used with child safety seat – type unknown
(18) Other belt used with child safety seat (specify):

_____

(99) Unknown if belt used

Manual (Active) Belt Failure Modes During Accident

(0) No manual belt used or not available
(1) No manual belt failure(s)
(2) Manual belt failure(s) (encode all that apply above)
[A] Torn webbing (stretched webbing not included)
[B] Broken buckle or latchplate
[C] Upper anchorage separated
[D] Other achorage separated (specify):

_____

[E] Broken retractor
[F] Other manual belt failure (specify):

_____

(9) Unknown

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

(0) No child safety seat
(1) Infant seat
(2) Toddler seat
(3) Convertible seat
(4) Booster seat
(7) Other type child safety seat (specify):

_____

(8) Unknown child safety seat type
(9) Unknown if child safety seat used

2. Child Safety Seat Orientation

(00) No child safety seat

Designed for Rear Facing for This Age/Weight
(01) Rear facing
(02) Forward facing
(03) Other orientation (specify):

_____

(04) Unknown orientation

Designed for Forward Facing for This Age/Weight
(11) Rear facing
(12) Forward facing
(18) Other orientation (specify):

_____

(19) Unknown orientation

Unknown Design or Orientation for This Age/Weight, or Unknown Age/Weight
(21) Rear facing
(22) Forward facing
(28) Other orientation (specify):

_____

(29) Unknown orientation

(99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

(00) No child safety seat

Not Designed with Harness/Shield/Tether
(01) After market harness/shield/tether added, not used
(02) After market harness/shield/tether used
(03) Child safety seat used, but no after market harness/shield/tether added
(09) Unknown if harness/shield/tether added or used

Designed with Harness/Shield/Tether
(11) Harness/shield/tether not used
(12) Harness/shield/tether used
(19) Unknown if harness/shield/tether used

Unknown if Designed with Harness/Shield/Tether
(21) Harness/shield/tether not used
(22) Harness/shield/tether used
(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

6. Child Safety Seat Make/Model
(Specify make/model and occupant number)

_____

_____

_____

_____

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for **each seat position** in the vehicle. The attributes for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3	0	3
	Seat Type	02	00	02
	Seat Performance	2G;B	0	2B
SECOND	Head Restraint Type/Damage	0	0	0
	Seat Type	03	03	03
	Seat Performance	2G	2G	2G
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			

Head Restraint Type/Damage by Occupant at This Occupant Position

(0) No head restraints
(1) Integral – no damage
(2) Integral – damaged during accident
(3) Adjustable – no damage
(4) Adjustable – damaged during accident
(5) Add-on – no damage
(6) Add-on – damaged during accident
(8) Other (specify): _____
(9) Unknown

Seat Type (This Occupant Position)

(00) No seat
(01) Bucket
(02) Bucket with folding back
(03) Bench
(04) Bench with separate back cushions
(05) Bench with folding back(s)
(06) Split bench with separate back cushions
(07) Split bench with folding back(s)
(08) Pedestal (i.e., van type)
(09) Other seat type (specify): _____
(99) Unknown

Seat Performance (This Occupant Position)

(0) No seat
(1) No seat performance failure(s)
(2) Seat performance failure(s)
(Encode all that apply)

[A] Seat adjusters failed
[B] Seat back folding locks failed
[C] Seat tracks failed
[D] Seat anchors failed
[E] Deformed by impact of passenger from rear
[F] Deformed by impact of passenger from front
[G] Deformed by own inertial forces
[H] Deformed by passenger compartment intrusion
(specify):

_____
_____
_____

[I] Other (specify): _____
_____

(9) Unknown

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E. UNUSUAL OCCUPANT CONTACT PATTERN)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indications that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION **No [ ]** **Yes [ ]**

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
Ejection Area						
Ejection Medium						
Medium Status						

Ejection
(1) Complete ejection
(2) Partial ejection
(3) Ejection, unknown degree
(9) Unknown

Ejection Area
(1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear
(7) Roof
(8) Other area (e.g., back of pickup, etc.) (specify): _____
(9) Unknown

Ejection Medium
(1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify): _____
(5) Integral structure
(8) Other medium (specify): _____
(9) Unknown

Medium Status (Immediately Prior to Impact)
(1) Open
(2) Closed
(3) Integral structure
(9) Unknown

ENTRAPMENT **No [ ]** **Yes [ ]**

Describe entrapment mechanism: _____

Component(s): _____

(Note in vehicle interior diagram)

PSU NUMBER 45

CASE NUMBER 121F

VEHICLE NUMBER 02

OCCUPANT NUMBER 01

OCCUPANT INJURY FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

[✓] ENTIRE FORM

[] PAGE NUMBER (S) _____

DNG

U.S. Department of Transportation
National Highway Traffic Safety Administration

UPDATE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number — 45
2. Case Number – Stratum — 121F
3. Vehicle Number — 02
4. Occupant Number — 01

RECEIVED [redacted] 1989

Driver or Occupant Name: [redacted]

Address: [redacted]

Other Information: _____

(Sanitize this section prior to Update submission.)

INJURY DATA CODED ON INITIAL SUBMISSION

	Source of Injury Data	O.I.C.–A.I.S. Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
1st	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
2nd	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
3rd	25.	26.	27.	28.	29.	30.	31.	32.	33.	34.
4th	35.	36.	37.	38.	39.	40.	41.	42.	43.	44.
5th	45.	46.	47.	48.	49.	50.	51.	52.	53.	54.
6th	55.	56.	57.	58.	59.	60.	61.	62.	63.	64.
7th	65.	66.	67.	68.	69.	70.	71.	72.	73.	74.
8th	75.	76.	77.	78.	79.	80.	81.	82.	83.	84.
9th	85.	86.	87.	88.	89.	90.	91.	92.	93.	94.
10th	95.	96.	97.	98.	99.	100.	101.	102.	103.	104.

NOTE: If necessary, keep copy of original Occupant Injury form and submit as part of update.

UPDATED CASE INFORMATION

	INITIAL SUBMISSION	FINAL
GV12. Alcohol Test Results for Driver	96	96
OA05. Occupant's Age	37	37
OA06. Occupant's Sex	1	1
OA07. Occupant's Height	65	65
OA08. Occupant's Weight	140	140
OA17. Manual (Active) Belt System Availability	4	4
OA18. Manual (Active) Belt System Use	00	00
OA21. Automatic (Passive) Restraint System Availability	0	0
OA22. Automatic (Passive) Restraint Function	0	0

	INITIAL SUBMISSION	FINAL
OA35. Treatment – Mortality	4	4
OA36. Type of Medical Facility (for Initial Treatment)	1	1
OA37. Hospital Stay	00	00
OA38. Working Days Lost	99	99
OA39. Time to Death	00	00
OA40. 1st Medically Reported Cause of Death	00	00
OA41. 2nd Medically Reported Cause of Death	00	00
OA42. 3rd Medically Reported Cause of Death	00	00
OA43. Number of Recorded Injuries for This Occupant	91	02

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the unofficial and official sources prior to initial case submission **and from subsequently** acquired medical data. Remember not to double count an injury just because it was identified from two different sources.

	Source of Injury Data	O.I.C. – A.I.S. Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
1st	5. 3	6. F	7. R	8. L	9. I	10. 1	11. 01	12. 3	13. 1	14. 00
2nd	15. 3	16. C	17. L	18. C	19. I	20. 1	21. 04	22. 3	23. 1	24. 00
3rd	25. 7	26. H	27. W	28. K	29. B	30. 1	31. 01	32. 3	33. 1	34. 00
4th	35. 3	36. F	37. R	38. L	39. O	40. 1	41. 01	42. 3	43. 1	44. 00
5th	45.	46.	47.	48.	49.	50.	51.	52.	53.	54.
6th	55.	56.	57.	58.	59.	60.	61.	62.	63.	64.
7th	65.	66.	67.	68.	69.	70.	71.	72.	73.	74.
8th	75.	76.	77.	78.	79.	80.	81.	82.	83.	84.
9th	85.	86.	87.	88.	89.	90.	91.	92.	93.	94.
10th	95.	96.	97.	98.	99.	100.	101.	102.	103.	104.
11th	105.	106.	107.	108.	109.	110.	111.	112.	113.	114.
12th	115.	116.	117.	118.	119.	120.	121.	122.	123.	124.
13th	125.	126.	127.	128.	129.	130.	131.	132.	133.	134.
14th	135.	136.	137.	138.	139.	140.	141.	142.	143.	144.
15th	145.	146.	147.	148.	149.	150.	151.	152.	153.	154.
16th	155.	156.	157.	158.	159.	160.	161.	162.	163.	164.
17th	165.	166.	167.	168.	169.	170.	171.	172.	173.	174.
18th	175.	176.	177.	178.	179.	180.	181.	182.	183.	184.
19th	185.	186.	187.	188.	189.	190.	191.	192.	193.	194.
20th	195.	196.	197.	198.	199.	200.	201.	202.	203.	204.

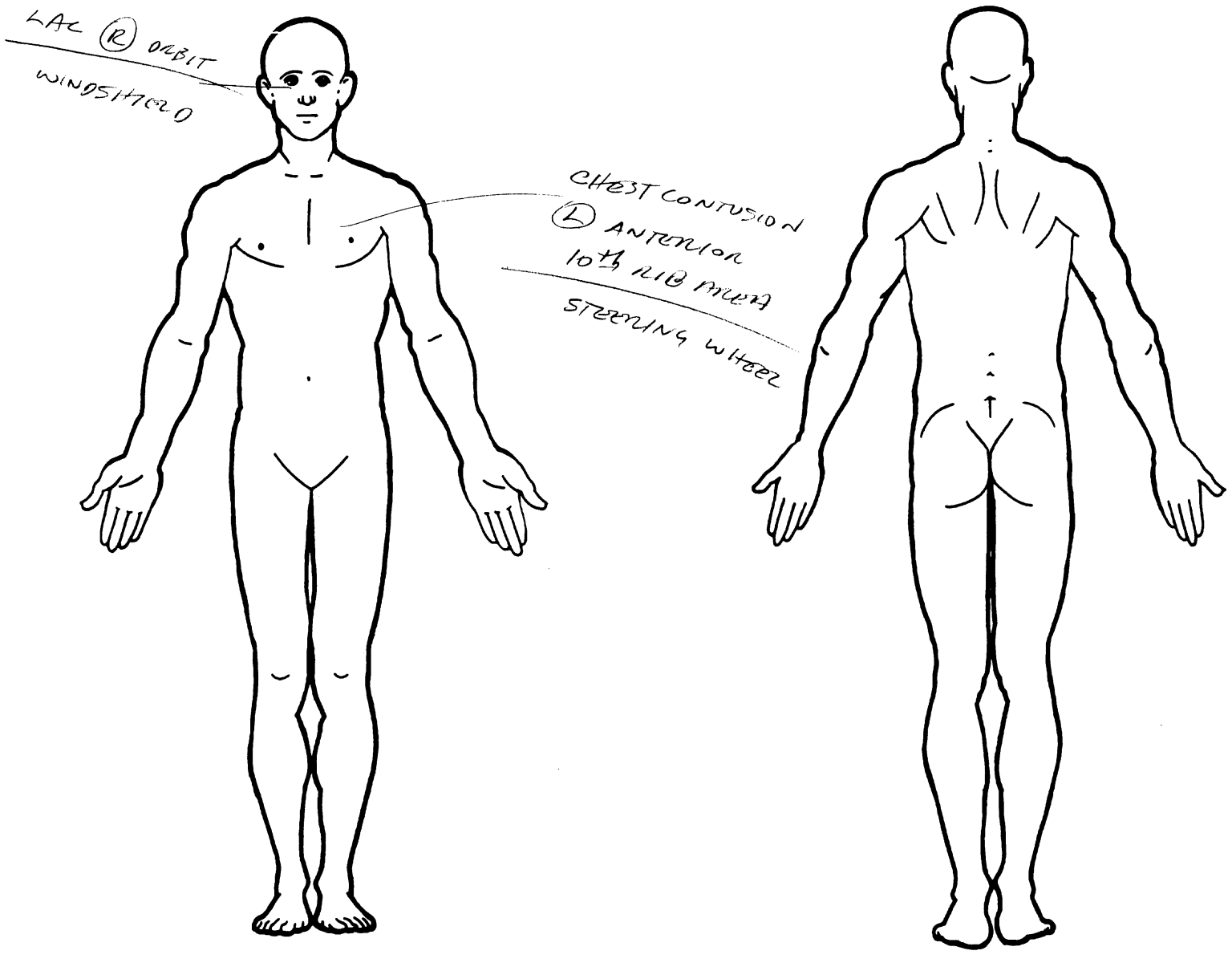
If greater than 20 injuries, code additional on Occupant Injury Data Supplement.

OCCUPANT INJURY DATA SUPPLEMENT

	Source of Injury Data	O.I.C. – A.I.S.					Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
		Body Region	Aspect	Lesion	System Organ	A.I.S. Severity				
21st	___	___	___	___	___	___	___ ___	___	___	___ ___
22nd	___	___	___	___	___	___	___ ___	___	___	___ ___
23rd	___	___	___	___	___	___	___ ___	___	___	___ ___
24th	___	___	___	___	___	___	___ ___	___	___	___ ___
25th	___	___	___	___	___	___	___ ___	___	___	___ ___
26th	___	___	___	___	___	___	___ ___	___	___	___ ___
27th	___	___	___	___	___	___	___ ___	___	___	___ ___
28th	___	___	___	___	___	___	___ ___	___	___	___ ___
29th	___	___	___	___	___	___	___ ___	___	___	___ ___
30th	___	___	___	___	___	___	___ ___	___	___	___ ___
31st	___	___	___	___	___	___	___ ___	___	___	___ ___
32nd	___	___	___	___	___	___	___ ___	___	___	___ ___
33rd	___	___	___	___	___	___	___ ___	___	___	___ ___
34th	___	___	___	___	___	___	___ ___	___	___	___ ___
35th	___	___	___	___	___	___	___ ___	___	___	___ ___
36th	___	___	___	___	___	___	___ ___	___	___	___ ___
37th	___	___	___	___	___	___	___ ___	___	___	___ ___
38th	___	___	___	___	___	___	___ ___	___	___	___ ___
39th	___	___	___	___	___	___	___ ___	___	___	___ ___
40th	___	___	___	___	___	___	___ ___	___	___	___ ___
41st	___	___	___	___	___	___	___ ___	___	___	___ ___
42nd	___	___	___	___	___	___	___ ___	___	___	___ ___
43rd	___	___	___	___	___	___	___ ___	___	___	___ ___
44th	___	___	___	___	___	___	___ ___	___	___	___ ___
45th	___	___	___	___	___	___	___ ___	___	___	___ ___

OFFICIAL INJURY DATA – SOFT TISSUE INJURIES

Indicate the *Location, Lesion, Detail* (size, depth, fracture type, head injury clinical signs and neurological deficits), and *Source* of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



SOURCE OF INJURY DATA

OFFICIAL

(1) Autopsy records with or without hospital medical records
(2) Hospital medical records other than emergency room (eg. discharge summary)
(3) Emergency room records only (including associated X-rays or other lab reports)
(4) Private physician, walk-in or emergency clinic

UNOFFICIAL

(5) Lay coroner report
(6) E.M.S. personnel
(7) Interviewee
(8) Other source (specify):

(9) Police

INJURY SOURCE

FRONT

(01) Windshield
(02) Mirror
(03) Sunvisor
(04) Steering wheel rim
(05) Steering wheel hub/spoke
(06) Steering wheel (combination of codes 04 and 05)
(07) Steering column, transmission selector lever, other attachment
(08) Add-on equipment (e.g., CB, tape deck, air conditioner)
(09) Left instrument panel and below
(10) Center instrument panel and below
(11) Right instrument panel and below
(12) Glove compartment door
(13) Knee bolster
(14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
(15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
(16) Other front object (specify):

LEFT SIDE

(20) Left side interior surface, excluding hardware or armrests
(21) Left side hardware or armrest
(22) Left A pillar
(23) Left B pillar
(24) Other left pillar (specify):

(25) Left side window glass or frame
(26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
(27) Other left side object (specify):

RIGHT SIDE

(30) Right side interior surface, excluding hardware or armrests
(31) Right side hardware or armrest
(32) Right A pillar
(33) Right B pillar
(34) Other right pillar (specify):

(35) Right side window glass or frame
(36) Right side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, roof side rail
(37) Other right side object (specify):

INTERIOR

(40) Seat, back support
(41) Belt restraint webbing/buckle
(42) Belt restraint B-pillar attachment point
(43) Other restraint system component (specify):

(44) Head restraint system
(45) Air cushion
(46) Other occupants (specify):

(47) Interior loose objects
(48) Child safety seat (specify):

(49) Other interior object (specify):

ROOF

(50) Front header
(51) Rear header
(52) Roof left side rail
(53) Roof right side rail
(54) Roof or convertible top

FLOOR

(56) Floor including toe pan
(57) Floor or console mounted transmission lever, including console
(58) Parking brake handle
(59) Foot controls including parking brake

REAR

(60) Backlight (rear window)
(61) Backlight storage rack, door, etc.
(62) Other rear object (specify):

EXTERIOR OF OCCUPANT'S VEHICLE

(65) Hood
(66) Outside hardware (e.g., outside mirror, antenna)
(67) Other exterior surface or tires (specify):

(68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

(70) Front bumper
(71) Hood edge
(72) Other front of vehicle (specify):

(73) Hood
(74) Hood ornament
(75) Windshield, roof rail, A-pillar
(76) Side surface
(77) Side mirrors
(78) Other side protrusions (specify):

(79) Rear surface
(80) Undercarriage
(81) Tires and wheels
(82) Other exterior of other motor vehicle (specify):

(83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

(84) Ground
(85) Other vehicle or object (specify)

(86) Unknown vehicle or object

NONCONTACT INJURY

(90) Fire in vehicle
(91) Flying glass
(92) Other noncontact injury source (specify)

(97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

(1) Certain
(2) Probable
(3) Possible
(9) Unknown

DIRECT/INDIRECT INJURY

(1) Direct contact injury
(2) Indirect contact injury
(3) Noncontact injury
(7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION

O.I.C. Body Region

(M) Abdomen
(Q) Ankle–foot
(A) Arm (upper)
(B) Back–thoracolumbar spine
(C) Chest
(E) Elbow
(F) Face
(R) Forearm
(H) Head–skull
(U) Injured, unknown region
(K) Knee
(L) Leg (lower)
(Y) Lower limb(s) (whole or unknown part)
(N) Neck–cervical spine
(P) Pelvic–hip
(S) Shoulder
(T) Thigh
(X) Upper limb(s) (whole or unknown part)
(O) Whole body
(W) Wrist–hand

Aspect of Injury

(A) Anterior–front
(B) Bilateral (rib fracture only).
(C) Central
(I) Inferior–lower
(U) Injured, unknown aspect
(L) Left
(P) Posterior–back
(R) Right
(S) Superior–upper
(W) Whole region

Lesion

(A) Abrasion
(M) Amputation
(V) Avulsion
(B) Burn
(K) Concussion
(C) Contusion
(N) Crush
(G) Detachment, separation
(D) Dislocation
(F) Fracture
(Z) Fracture and dislocation
(U) Injured, unknown lesion
(L) Laceration
(O) Other
(P) Perforation, puncture
(R) Rupture
(S) Sprain
(T) Strain
(E) Total severance, transection

System/Organ

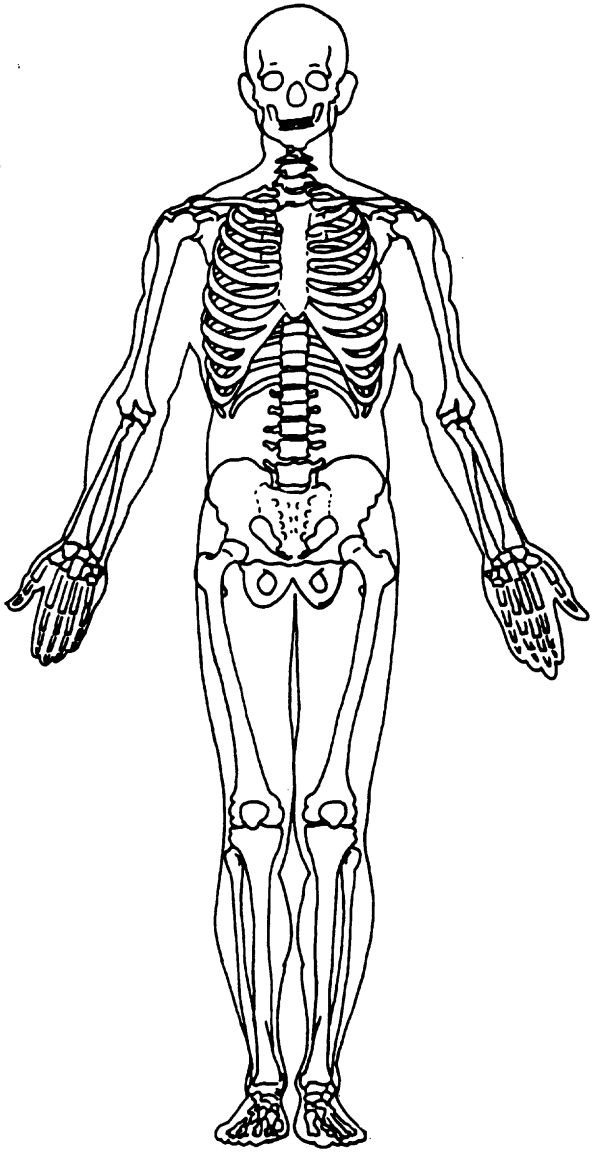
(W) All systems in region
(A) Arteries–veins
(B) Brain
(D) Digestive
(E) Ears
(O) Eye
(H) Heart
(U) Injured, unknown system
(I) Integumentary
(J) Joints
(K) Kidneys
(L) Liver
(M) Muscles
(N) Nervous system
(P) Pulmonary–lungs
(R) Respiratory
(S) Skeletal
(C) Spinal cord
(Q) Spleen
(T) Thyroid, other endocrine gland
(G) Urogenital
(V) Vertebrae

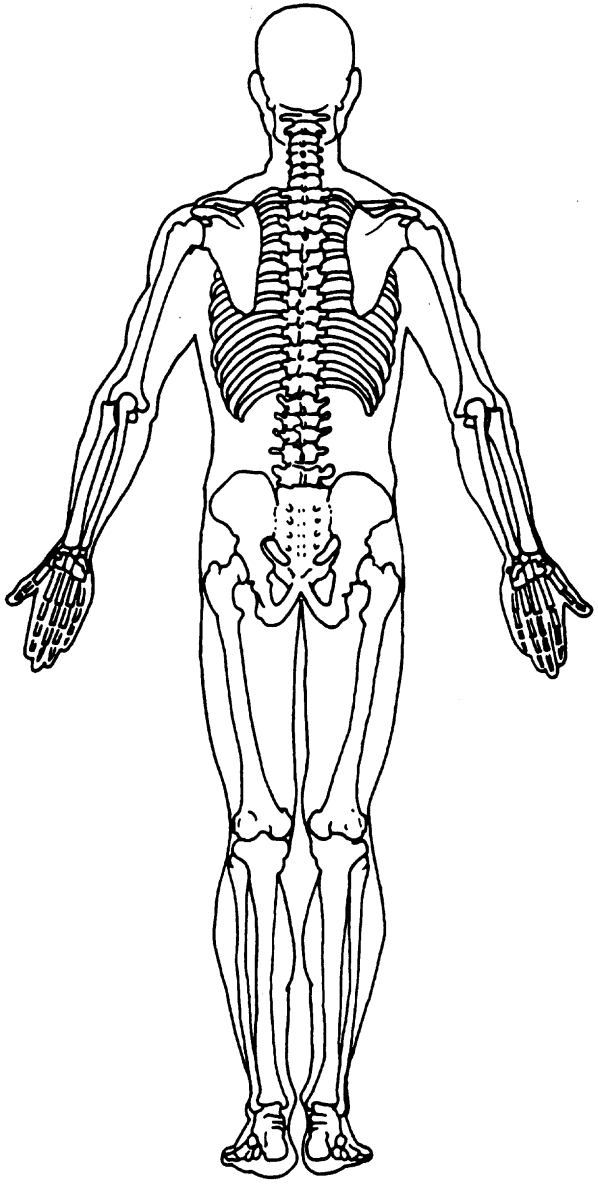
Abbreviated Injury Scale

(1) Minor injury
(2) Moderate injury
(3) Serious injury
(4) Severe injury
(5) Critical injury
(6) Maximum (untreatable)
(7) Injured, unknown severity

OFFICIAL INJURY DATA—SKELETAL INJURIES

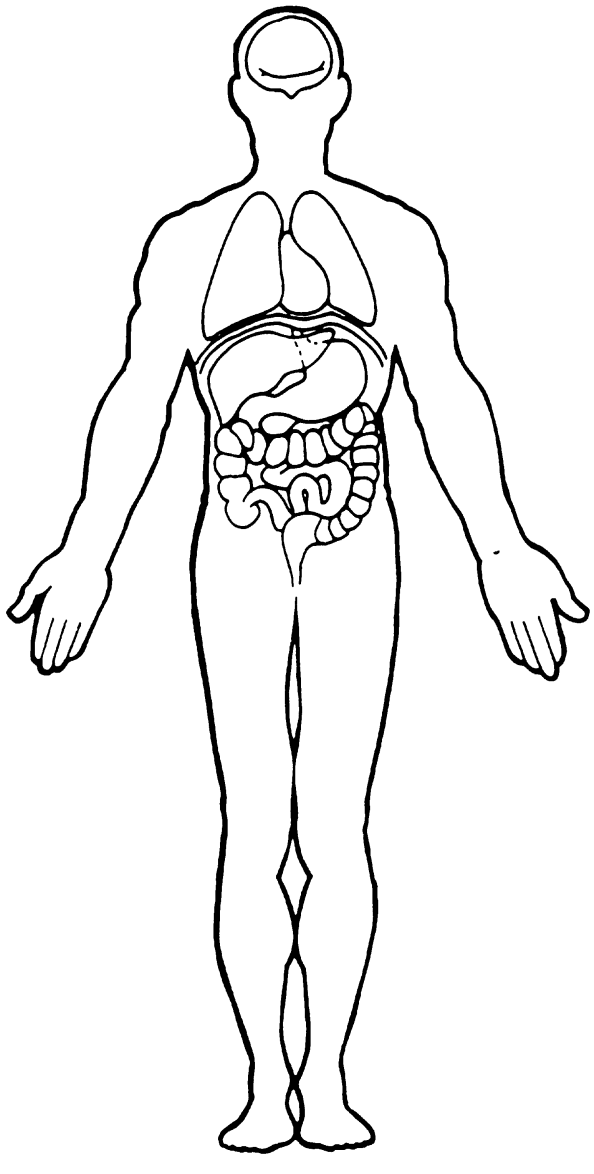
Indicate the *Location, Lesion, Detail* (size, depth, fracture type, head injury clinical signs and neurological deficits), and *Source* of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

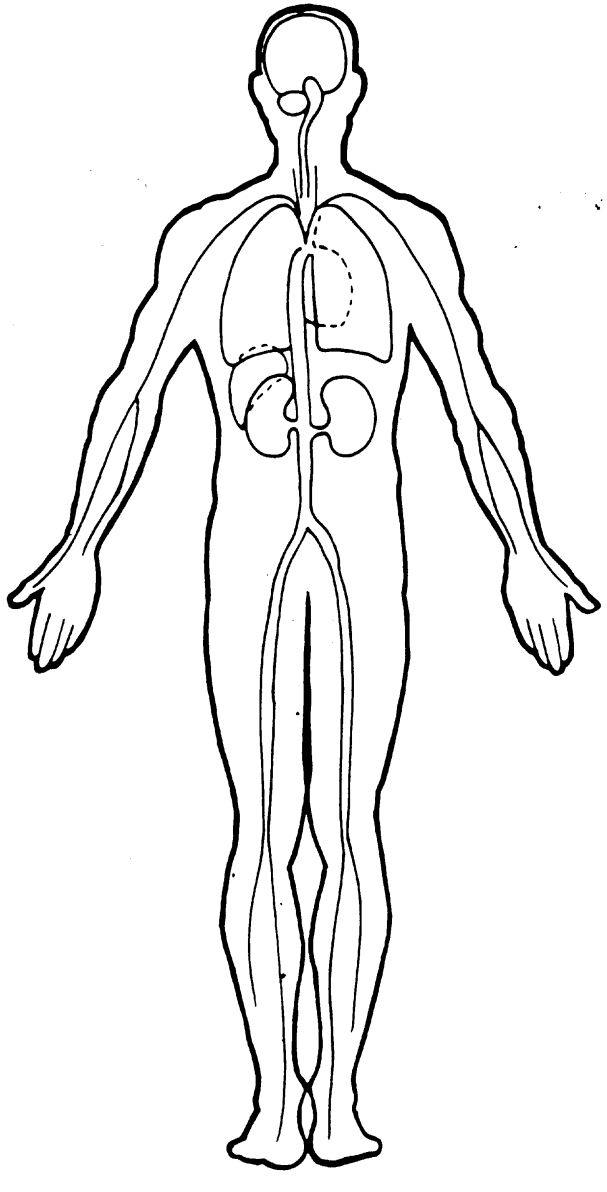




OFFICIAL INJURY DATA – INTERNAL INJURIES

Indicate the *Location, Lesion, Detail* (size, depth, fracture type, head injury clinical signs and neurological deficits), and *Source* of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





U.S. Department of Transportation
National Highway Traffic Safety Administration

EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 45	3. Vehicle Number: 03
2. Case Number–Stratum: 121 F	

VEHICLE IDENTIFICATION

VIN 1MRBP98F2FY[redacted] Model Year 1985

Vehicle Make (specify): LINCOLN Vehicle Model (specify): MARK 7

LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	BEGINS 10.2" FROM L.R. CORNER	ENTIRE REAR PLANE

CRUSH PROFILE

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush.

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of C-Measurements	Direct Damage: Width (CDC)	Direct Damage: Max Crush	Field L	C_1	C_2	C_3	C_4	C_5	C_6	±D
1	REAR BUMPER	10.2	8.9	59.1	3.6	3.8	5.3	5.6	6.6	8.7	0
1	FREE SPACE		.3		3.0	.7	.1	.1	.7	3.0	0
1	C-MEA		8.6		.6	3.1	5.2	5.5	5.9	5.7	0

HS Form 435A
1/89

VEHICLE DAMAGE SKETCH

TIRE – WHEEL DAMAGE

a. Rotation physically restricted

RF 2
LF 2
RR 1
LR 2

b. Tire deflated

RF 2
LF 2
RR 2
LR 2

(1) Yes (2) No (8) NA (9) Unk.

TYPE OF TRANSMISSION

☐ Manual ☒ Automatic

ORIGINAL SPECIFICATIONS

Wheelbase	108.5
Overall Length	202.8
Maximum Width	70.9
Curb Weight	3625
Average Track	60.0
Front Overhang	43.0
Rear Overhang	51.3
Engine Size: cyl./ displ.	5.0L V8
Undeformed End Width	59.0

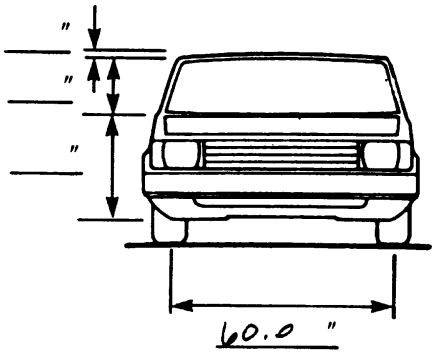
WHEEL STEER ANGLES
(For locked front wheels or displaced rear axles only)

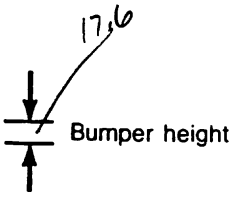
RF ± ___ ___ °
LF ± ___ ___ °
RR ± ___ ___ °
LR ± ___ ___ °
Within ±5 degrees

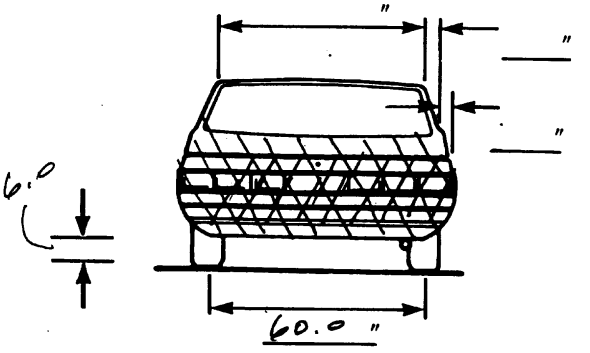
DRIVE WHEELS

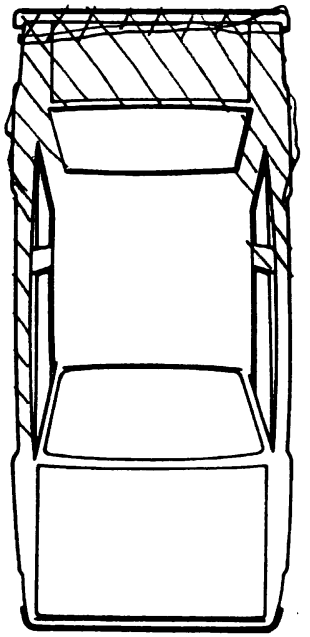
☐ FWD ☒ RWD ☐ 4WD

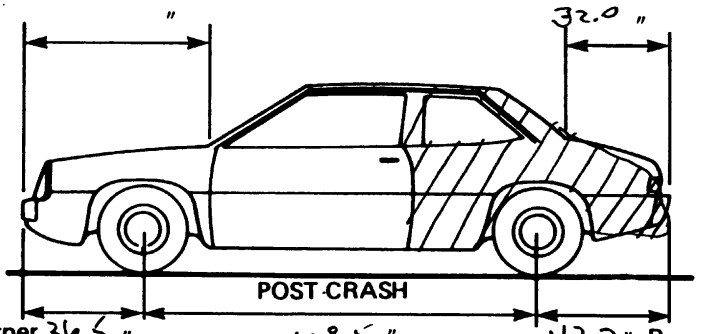
Approximate Cargo Weight 0





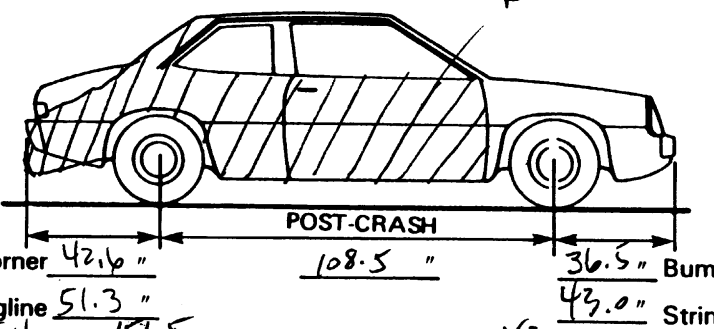






Bumper corner 36.5 "
Stringline 43.0 "
108.5 "
47.7 " Bumper corner
51.3 " Stringline
0 6.5 43.0
151.5 199.2 202.8

RESTRICTED



Bumper corner 42.6 "
Stringline 51.3 "
108.5 "
36.5 " Bumper corner
43.0 " Stringline
202.8 194.1 151.5
43.0 6.5 0

NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewall, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.
Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

01-30—Vehicle Number

Noncollision
- (31) Overturn—rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify): _____
- (35) Noncollision injury
- (38) Other noncollision (specify): _____
- (39) Noncollision—details unknown

Collision with Fixed Object
- (41) Tree (≤4 inches in diameter)
- (42) Tree (>4 inches in diameter)
- (43) Shrubbery or bush
- (44) Embankment
- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post
- (50) Pole or post (≤4 inches in diameter)
- (51) Pole or post (>4 but ≤12 inches in diameter)
- (52) Pole or post (>12 inches in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (specify): _____
- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or Culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): _____
- (69) Unknown fixed object

Collision With Nonfixed Object
- (71) Motor vehicle not in transport
- (72) Pedestrian
- (73) Cyclist or cycle
- (74) Other nonmotorist or conveyance (specify): _____
- (75) Vehicle occupant
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (88) Other nonfixed object (specify): _____
- (89) Unknown nonfixed object

- (98) Other event (specify): _____
- (99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
02	02	180	00	B	D	E	W	02

US Department of Transportation
National Highway Traffic Safety Administration

INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 45
2. Case Number–Stratum 121F
3. Vehicle Number 03

INTEGRITY

4. Passenger Compartment Integrity 00

(00) No integrity loss

Yes, Integrity Was Lost Through
(01) Windshield
(02) Door (side)
(03) Door/hatch (rear)
(04) Roof
(05) Roof glass
(06) Side window
(07) Rear window
(08) Roof and roof glass
(09) Windshield and door (side)
(10) Windshield and roof
(11) Side and rear window
(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate Or Hatch Opening

5. LF 1 6. RF 3 7. LR 0 8. RR 0 9. TG/H 0

(0) No door/gate/hatch
(1) Door/gate/hatch remained closed and operational
(2) Door/gate/hatch came open during collision
(3) Door/gate/hatch jammed shut
(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then Code 0.

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate, or Hatch Came Open During Collision
(1) Door operational (no damage)
(2) Latch/striker failure due to damage
(3) Hinge failure due to damage
(4) Door structure failure due to damage
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
(6) Latch/striker and hinge failure due to damage
(8) Other failure (specify):

(9) Unknown

GLAZING

Glazing Damage from Impact Forces

15. WS 0 16. LF 0 17. RF 0 18. LR 0 19. RR 0
20. BL 0 21. Roof 8 22. Other 8

(0) No glazing damage from impact forces
(2) Glazing in place and cracked from impact forces
(3) Glazing in place and holed from impact forces
(4) Glazing out-of-place (cracked or not) and not holed from impact forces
(5) Glazing out-of-place and holed from impact forces
(6) Glazing disintegrated from impact forces
(7) Glazing removed prior to accident
(8) No glazing
(9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS 0 24. LF 0 25. RF 0 26. LR 0 27. RR 0
28. BL 0 29. Roof 0 30. Other 0

(0) No occupant contact to glazing or no glazing
(1) Glazing contacted by occupant but no glazing damage
(2) Glazing in place and cracked by occupant contact
(3) Glazing in place and holed by occupant contact
(4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
(5) Glazing out-of-place by occupant contact and holed by occupant contact
(6) Glazing disintegrated by occupant contact
(9) Unknown if contacted by occupant

If No Glazing Damage ***And*** No Occupant Contact or No Glazing, Then Code IV 31 Through IV 46 As 0

Type of Window/Windshield Glazing

31. WS 0 32. LF 0 33. RF 0 34. LR 0 35. RR 0
36. BL 0 37. Roof 0 38. Other 0

(0) No glazing contact and no damage, or no glazing
(1) AS-1 – Laminated
(2) AS-2 – Tempered
(3) AS-3 – Tempered-tinted
(4) AS-14 – Glass/Plastic
(8) Other (specify):

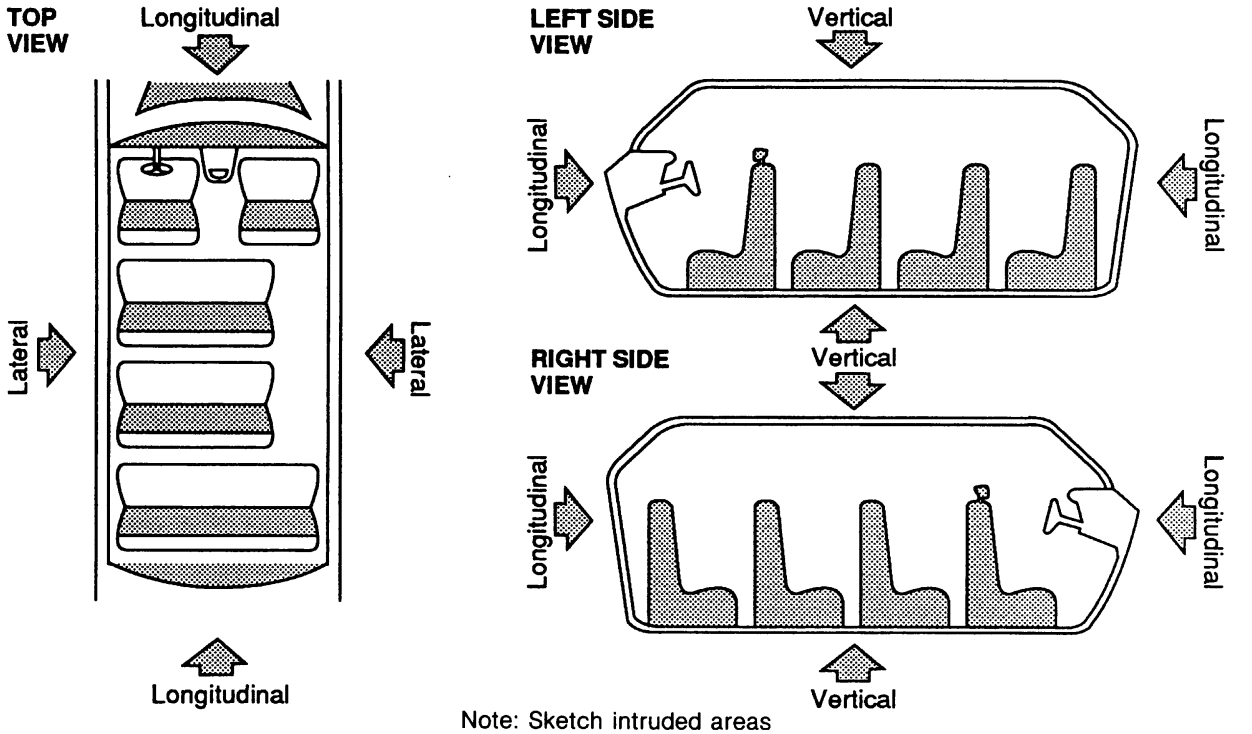
(9) Unknown

Window Precrash Glazing Status

39. WS 0 40. LF 0 41. RF 0 42. LR 0 43. RR 0
44. BL 0 45. Roof 0 46. Other 0

(0) No glazing contact and no damage, or no glazing
(1) Fixed
(2) Closed
(3) Partially opened
(4) Fully opened
(9) Unknown

INTRUSION WORK SHEET



Note: Sketch intruded areas

LOCATION OF INTRUSION	INTRUDED COMPONENT	COMPARISION VALUE	–	INTRUDED VALUE	=	INTRUSION	DOMINANT CRUSH DIRECTION
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		

Document no more than the 15 most severe intrusions

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV 47-IV 86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47.____	48.____	49.____	50.____
2nd	51.____	52.____	53.____	54.____
3rd	55.____	56.____	57.____	58.____
4th	59.____	60.____	61.____	62.____
5th	63.____	64.____	65.____	66.____
6th	67.____	68.____	69.____	70.____
7th	71.____	72.____	73.____	74.____
8th	75.____	76.____	77.____	78.____
9th	79.____	80.____	81.____	82.____
10th	83.____	84.____	85.____	86.____

LOCATION OF INTRUSION

NONE

Front Seat
- (11) Left
- (12) Middle
- (13) Right

Second Seat
- (21) Left
- (22) Middle
- (23) Right

Third Seat
- (31) Left
- (32) Middle
- (33) Right

Fourth Seat
- (41) Left
- (42) Middle
- (43) Right

(98) Other enclosed area (specify): _____

(99) Unknown

INTRUDING COMPONENT

Interior Components
- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back panel or door surface
- (26) Other interior component (specify): _____
- (27) Side panel - forward of the A-pillar
- (28) Side panel - rear of the A-pillar

Exterior Components
- (30) Hood
- (31) Outside surface of vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

MAGNITUDE OF INTRUSION

- (1) ≥ 1 inch but < 3 inches
- (2) ≥ 3 inches but < 6 inches
- (3) ≥ 6 inches but < 12 inches
- (4) ≥ 12 inches but < 18 inches
- (5) ≥ 18 inches but < 24 inches
- (6) ≥ 24 inches
- (9) Unknown

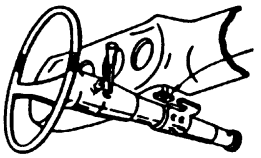
DOMINANT CRUSH DIRECTION

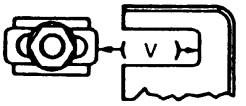
- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (9) Unknown

STEERING COLUMN WORKING DIAGRAMS

STEERING COLUMN COLLAPSE

Steering Column Shear Module Movement

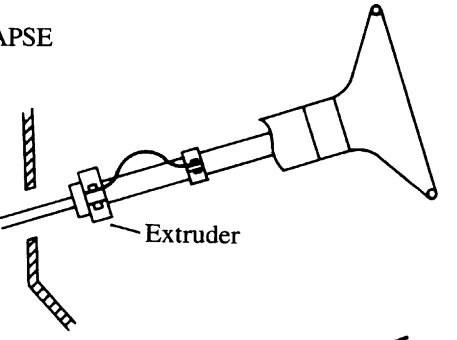




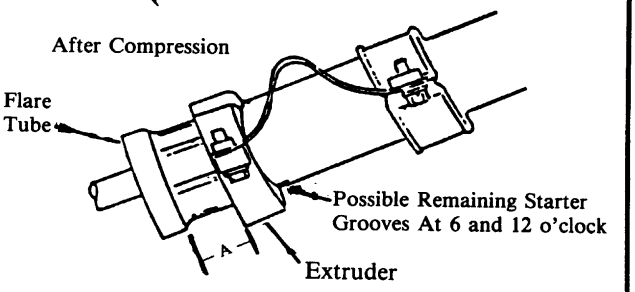
Left ____

Right ____ V = _____"

Direction and Magnitude of Steering Column Movement



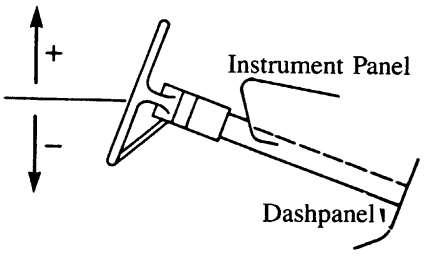
After Compression



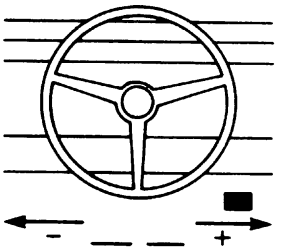
Compression = Measurement A A =_____

STEERING COLUMN MOVEMENT

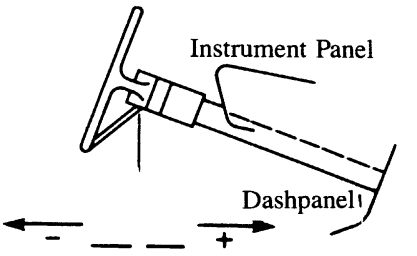
Vertical Movement



Lateral Movement



Longitudinal Movement



	COMPARISON VALUE – DAMAGED VALUE = MOVEMENT
VERTICAL	– =
LATERAL	– =
LONGITUDINAL	– =

STEERING RIM/SPOKE DEFORMATION

COMPARISON VALUE – DAMAGED VALUE = DEFORMATION
– =
– =

STEERING COLUMN

87. Steering Column Type 1
(1) Fixed column
(2) Tilt column
(3) Telescoping column
(4) Tilt and telescoping column
(8) Other column type (specify):

(9) Unknown

If PDOF ≠ 11, 12 or 1, Then Code IV88-IV91 As 96

88. Steering Column Collapse Due to Occupant Loading 96

_____ **Code actual measured movement to the nearest inch. See coding manual for measurement technique(s).**
(00) No movement, compression, or collapse
(01-49) Actual measured value
(50) 50 inches or greater

Estimated movement from observation
(81) Less than 1 inch
(82) ≥ 1 inch but < 2 inches
(83) ≥ 2 inches but < 4 inches
(84) ≥ 4 inches but < 6 inches
(85) ≥ 6 inches but < 8 inches
(86) Greater than or equal to 8 inches
(96) Not assessed (PDOF ≠ 11, 12, 1)
(97) Apparent movement, value undetermined or cannot be measured or estimated
(98) Nonspecified type column
(99) Unknown

Direction And Magnitude of Steering Column Movement

89. Vertical Movement +96

90. Lateral Movement +96

91. Longitudinal Movement +96

Code the actual measured movement to the nearest inch. See Coding Manual for measurement technique(s)
(+00) No Steering column movement
(±01 – ±49) Actual measured value
(±50) 50 inches or greater

Estimated movement from observation
(±81) ≥ 1 inch but < 3 inches
(±82) ≥ 3 inches but < 6 inches
(±83) ≥ 6 inches but < 12 inches
(±84) ≥ 12 inches
(__96) Not assessed (PDOF ≠ 11, 12, 1)
(__97) Apparent movement > 1 inch but cannot be measured or estimated
(__99) Unknown

92. Steering Rim/Spoke Deformation 0

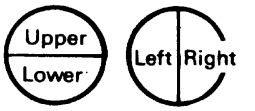
_____ **Code actual measured deformation to the nearest inch.**
(0) No steering rim deformation
(1-5) Actual measured value
(6) 6 inches or more
(8) Observed deformation cannot be measured
(9) Unknown

93. Location of Steering Rim/Spoke Deformation 00

(00) No steering rim deformation

Quarter Sections
(01) Section A
(02) Section B
(03) Section C
(04) Section D

Half Sections
(05) Upper half of rim/spoke
(06) Lower half of rim/spoke
(07) Left half of rim/spoke
(08) Right half of rim/spoke



(09) Complete steering wheel collapse
(10) Undetermined location
(99) Unknown

INSTRUMENT PANEL

94. Odometer Reading 999,000

DIGITAL **miles—Code mileage to the nearest 1,000 miles**
(000) No odometer
(001) Less than 1,500 miles
(300) 299,500 miles or more
(999) Unknown

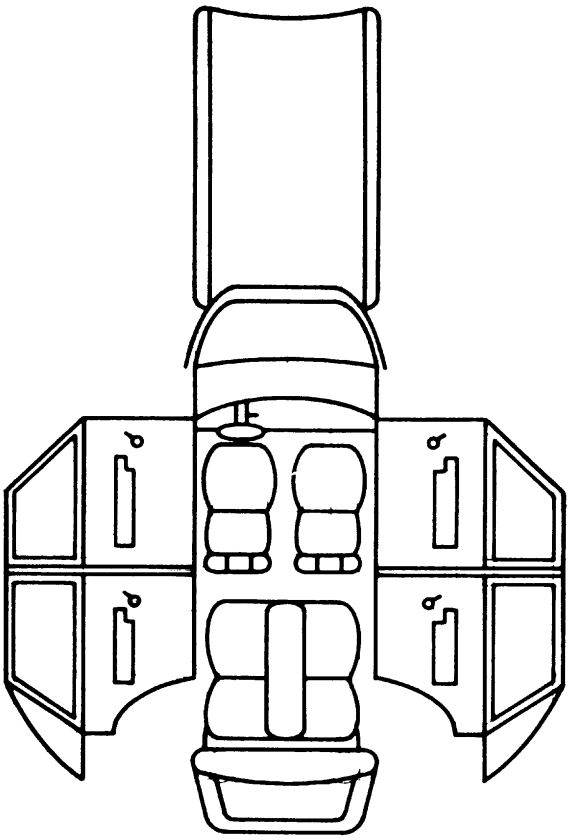
Source: [redacted]

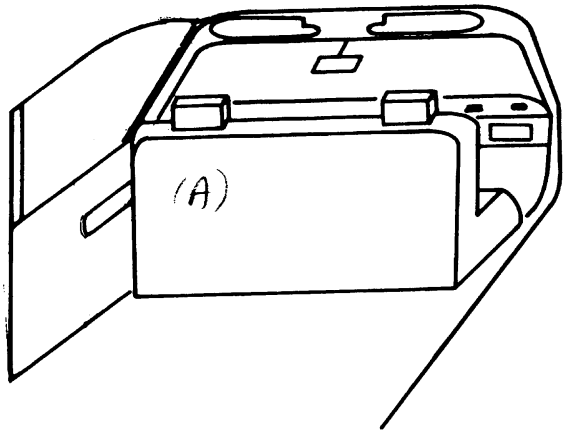
95. Instrument Panel Damage from Occupant Contact 0
(0) No
(1) Yes
(9) Unknown

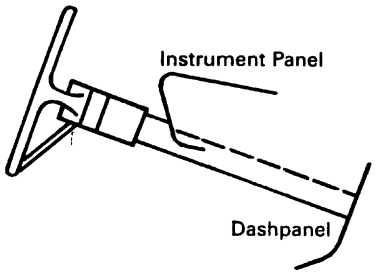
96. Knee Bolsters Deformed from Occupant Contact 8
(0) No
(1) Yes
(8) Not present
(9) Unknown

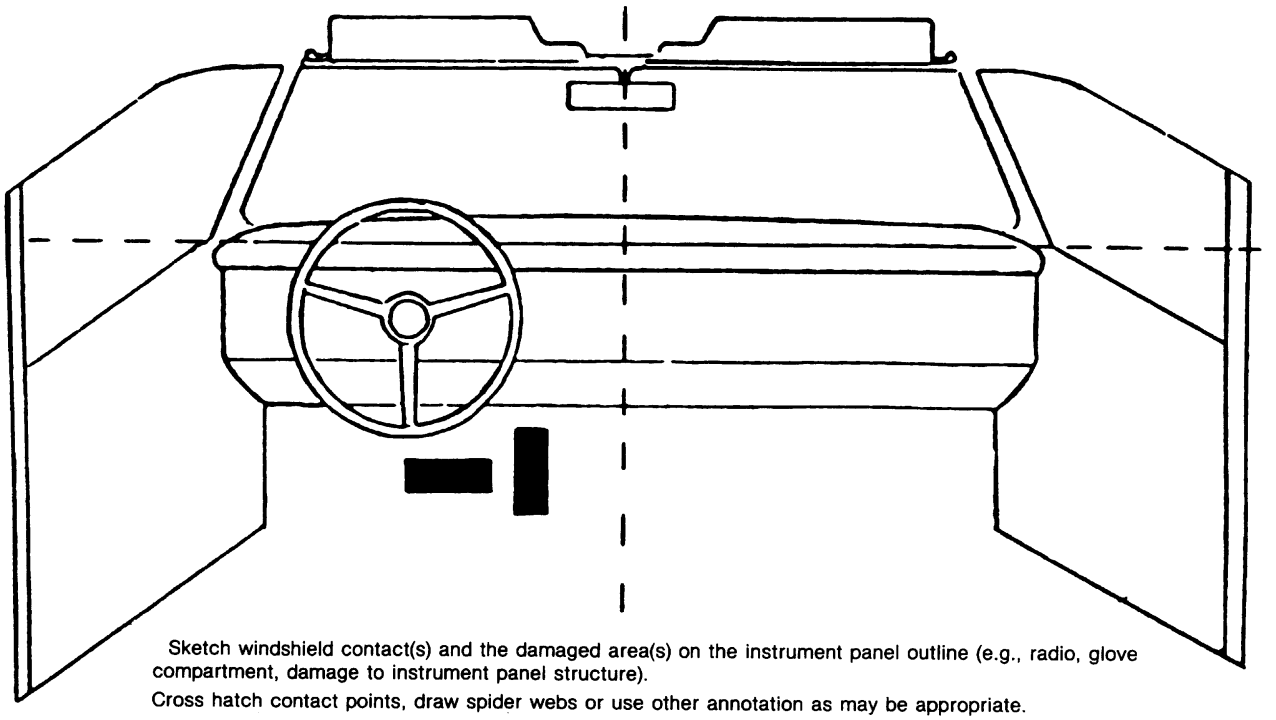
97. Did Glove Compartment Door Open During Collision(s) 0
(0) No
(1) Yes
(8) Not present
(9) Unknown

VEHICLE INTERIOR SKETCHES









Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	40	3	KNEE	BENT SEAT BACK	2
B					
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT
- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror,or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify): _____

LEFT SIDE
- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify): _____
- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
- (27) Other left side object (specify): _____

RIGHT SIDE
- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify): _____
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
- (37) Other right side object (specify): _____

INTERIOR
- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): _____
- (44) Head restraint system
- (45) Air cushion
- (46) Other occupants (specify): _____
- (47) Interior loose objects
- (48) Child safety seat (specify): _____
- (49) Other interior object (specify): _____

ROOF
- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR
- (56) Floor including toe pan
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR
- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

CONFIDENCE LEVEL OF CONTACT POINT
- (1) Certain
- (2) Probable
- (3) Possible
- (4) Unknown

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attributes for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Availability			
	Function			
	Failure			

Automatic (Passive) Restraint System Availability

(0) Not equipped/not available
(1) Airbag
(2) Airbag disconnected (specify):

_____

(3) Airbag not reinstalled
(4) 2 point automatic belts
(5) 3 point automatic belts
(6) Automatic belts destroyed or rendered inoperative
(9) Unknown

Automatic (Passive) Restraint Function

(0) Not equipped/not available

Automatic Belt
(1) Automatic belt in use
(2) Automatic belt not in use
(3) Automatic belt use unknown

Air Bag
(4) Airbag deployed during accident
(5) Airbag deployed inadvertently just prior to accident
(6) Deployed, accident sequence undetermined
(7) Nondeployed
(8) Unknown if deployed
(9) Unknown

Did Automatic (Passive) Restraint Fail

(0) Not equipped/not available
(1) No
(2) Yes (specify): _____
(9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data **for each seat position** in the vehicle. The attributes for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	0	4
	Use	04	00	04
	Failure Modes	1	0	1
SECOND	Availability	3	3	3
	Use	00	00	00
	Failure Modes	0	0	0
THIRD	Availability			
	Use			
	Failure Modes			
OTHER	Availability			
	Use			
	Failure Modes			

Manual (Active) Belt System Availability

(0) Not available
(1) Belt removed/destroyed
(2) Shoulder belt
(3) Lap belt
(4) Lap and shoulder belt
(5) Belt available – type unknown
(8) Other belt (specify):

_____

(9) Unknown

Manual (Active) Belt System Use

(00) None used, not available, or belt removed/destroyed
(01) Inoperative (specify):

_____

(02) Shoulder belt
(03) Lap belt
(04) Lap and shoulder belt
(05) Belt used – type unknown

_____

(08) Other belt used (specify):

_____

(12) Shoulder belt used with child safety seat
(13) Lap belt used with child safety seat
(14) Lap and shoulder belt used with child safety seat
(15) Belt used with child safety seat – type unknown
(18) Other belt used with child safety seat (specify):

_____

(99) Unknown if belt used

Manual (Active) Belt Failure Modes During Accident

(0) No manual belt used or not available
(1) No manual belt failure(s)
(2) Manual belt failure(s) (encode all that apply above)
[A] Torn webbing (stretched webbing not included)
[B] Broken buckle or latchplate
[C] Upper anchorage separated
[D] Other achorage separated (specify):

_____

[E] Broken retractor
[F] Other manual belt failure (specify):

_____

(9) Unknown

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

(0) No child safety seat
(1) Infant seat
(2) Toddler seat
(3) Convertible seat
(4) Booster seat
(7) Other type child safety seat (specify):

_____

(8) Unknown child safety seat type
(9) Unknown if child safety seat used

2. Child Safety Seat Orientation

(00) No child safety seat

Designed for Rear Facing for This Age/Weight
(01) Rear facing
(02) Forward facing
(03) Other orientation (specify):

_____

(04) Unknown orientation

Designed for Forward Facing for This Age/Weight
(11) Rear facing
(12) Forward facing
(18) Other orientation (specify):

_____

(19) Unknown orientation

Unknown Design or Orientation for This Age/Weight, or Unknown Age/Weight
(21) Rear facing
(22) Forward facing
(28) Other orientation (specify):

_____

(29) Unknown orientation

(99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

(00) No child safety seat

Not Designed with Harness/Shield/Tether
(01) After market harness/shield/tether added, not used
(02) After market harness/shield/tether used
(03) Child safety seat used, but no after market harness/shield/tether added
(09) Unknown if harness/shield/tether added or used

Designed with Harness/Shield/Tether
(11) Harness/shield/tether not used
(12) Harness/shield/tether used
(19) Unknown if harness/shield/tether used

Unknown if Designed with Harness/Shield/Tether
(21) Harness/shield/tether not used
(22) Harness/shield/tether used
(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

6. Child Safety Seat Make/Model
(Specify make/model and occupant number)

_____

_____

_____

_____

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for **each seat position** in the vehicle. The attributes for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3	0	3
	Seat Type	02	00	02
	Seat Performance	2E	0	1
SECOND	Head Restraint Type/Damage	0	0	0
	Seat Type	03	03	03
	Seat Performance	1	1	1
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			

Head Restraint Type/Damage by Occupant at This Occupant Position

(0) No head restraints
(1) Integral – no damage
(2) Integral – damaged during accident
(3) Adjustable – no damage
(4) Adjustable – damaged during accident
(5) Add-on – no damage
(6) Add-on – damaged during accident
(8) Other (specify): _____
(9) Unknown

Seat Type (This Occupant Position)

(00) No seat
(01) Bucket
(02) Bucket with folding back
(03) Bench
(04) Bench with separate back cushions
(05) Bench with folding back(s)
(06) Split bench with separate back cushions
(07) Split bench with folding back(s)
(08) Pedestal (i.e., van type)
(09) Other seat type (specify): _____
(99) Unknown

Seat Performance (This Occupant Position)

(0) No seat
(1) No seat performance failure(s)
(2) Seat performance failure(s)
(Encode all that apply)

[A] Seat adjusters failed
[B] Seat back folding locks failed
[C] Seat tracks failed
[D] Seat anchors failed
[E] Deformed by impact of passenger from rear
[F] Deformed by impact of passenger from front
[G] Deformed by own inertial forces
[H] Deformed by passenger compartment intrusion (specify):

_____
_____
_____

[I] Other (specify): _____
_____

(9) Unknown

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E. UNUSUAL OCCUPANT CONTACT PATTERN)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indications that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION **No [X]** **Yes [ ]**

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
Ejection Area						
Ejection Medium						
Medium Status						

Ejection
(1) Complete ejection
(2) Partial ejection
(3) Ejection, unknown degree
(9) Unknown

Ejection Area
(1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear
(7) Roof
(8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

Ejection Medium
(1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify):

(5) Integral structure
(8) Other medium (specify):

(9) Unknown

Medium Status (Immediately Prior to Impact)
(1) Open
(2) Closed
(3) Integral structure
(9) Unknown

ENTRAPMENT **No [X]** **Yes [ ]**

Describe entrapment mechanism:

Component(s):

(Note in vehicle interior diagram)

PSU NUMBER 45

CASE NUMBER 121F

VEHICLE NUMBER 03

OCCUPANT NUMBER 01

OCCUPANT INJURY FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

[✓] ENTIRE FORM

[ ] PAGE NUMBER (S) _____

US Department of Transportation
National Highway Traffic Safety Administration

CRASHPC PROGRAM SUMMARY

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

Identifying Title

45	121F	01	[redacted] 89
Primary Sampling Unit	Case No.–Stratum	Accident Event Sequence No.	Date (mm dd yy)

CRASHPC Vehicle Identification

	Year	Make	Model	NASS Veh. No.
Vehicle 1	1971	FORD	TORINO WAGON	1
Vehicle 2	1987	FORD	TEMPO	2

GENERAL INFORMATION

	VEHICLE 1	VEHICLE 2
Size	4	2
Weight	3380 + 388 + 0 = 3768 (Curb + Occupant(s) + Cargo)	2462 + 140 + 0 = 2602 (Curb + Occupant(s) + Cargo)
CDC	12FDEWR	06BDEW5
PDOF	000	180
Stiffness	4	2

SCENE INFORMATION

Rest and Impact Positions [ ] No, ***Go To Damage Information*** [ ] Yes

	VEHICLE 1	VEHICLE 2
Rest Position		
X	———.—	———.—
Y	———.—	———.—
PSI	———.—	———.—
Impact Position		
X	———.—	———.—
Y	———.—	———.—
PSI	———.—	———.—
Slip Angle	———	———

VEHICLE MOTION

Sustained Contact [ ] No [ ] Yes

	VEHICLE 1	VEHICLE 2
Skidding	[ ] No [ ] Yes	[ ] No [ ] Yes
Skidding Stop Before Rest	[ ] No [ ] Yes	[ ] No [ ] Yes
End-of-Skidding Position		
X	———.—	———.—
Y	———.—	———.—
PSI	———.—	———.—
Curved Path	[ ] No [ ] Yes	[ ] No [ ] Yes
Point on Path		
X	———.—	———.—
Y	———.—	———.—
Rotation Direction	[ ] None [ ] CW [ ] CCW	[ ] None [ ] CW [ ] CCW
Rotation > 360°	[ ] No [ ] Yes	[ ] No [ ] Yes

National Accident Sampling System – Crashworthiness Data System: CrashPC Program Summary

FRICTION INFORMATION

Coefficient of Friction . ___ ___ ___

Rolling Resistance Option ___

Vehicle 1 Rolling Resistance

LF ___ . ___ ___ RF ___ . ___ ___

LR ___ . ___ ___ RR ___ . ___ ___

Vehicle 2 Rolling Resistance

LF ___ . ___ ___ RF ___ . ___ ___

LR ___ . ___ ___ RR ___ . ___ ___

TRAJECTORY INFORMATION

Trajectory Data [ ] No [ ] Yes

If No, Go To Damage Information

Vehicle 1 Steer Angles

LF ___ ___ ___ RF ___ ___ ___

LR ___ ___ ___ RR ___ ___ ___

Vehicle 2 Steer Angles

LF ___ ___ ___ RF ___ ___ ___

LR ___ ___ ___ RR ___ ___ ___

Terrain Boundary [ ] No [ ] Yes

First Point

X ___ ___ ___ . ___ Y ___ ___ ___ . ___

Second Point

X ___ ___ ___ . ___ Y ___ ___ ___ . ___

Secondary Friction Coefficient . ___ ___ ___

DAMAGE INFORMATION

	VEHICLE 1	VEHICLE 2
Damage Length	67.0	61.0
Crush Depths C1	4.0	25.8
C2	8.5	21.7
C3	18.5	17.6
C4	21.5	13.4
C5	15.5	9.7
C6	21.5	5.3
Damage Offset	± 000.00	± 000.00

IF THIS COMMON IMPACT WAS WITH A MOTOR VEHICLE *NOT IN TRANSPORT*, FILL IN THE INFORMATION BELOW.

Model Year: _____

Make: _____

Model: _____

VIN: _____

The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.

Complete and ATTACH the appropriate vehicle damage sketch and dimensions to the Form.

SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

CRASH3 RECONSTRUCTION

SPEED CHANGE (DAMAGE)		TOTAL (MPH)	LONG. (MPH)	LAT. (MPH)	ANG. (DEG)
	VEH #1	20.7	-20.7	.0	.0
	VEH #2	30.0	30.0	.0	-180.0

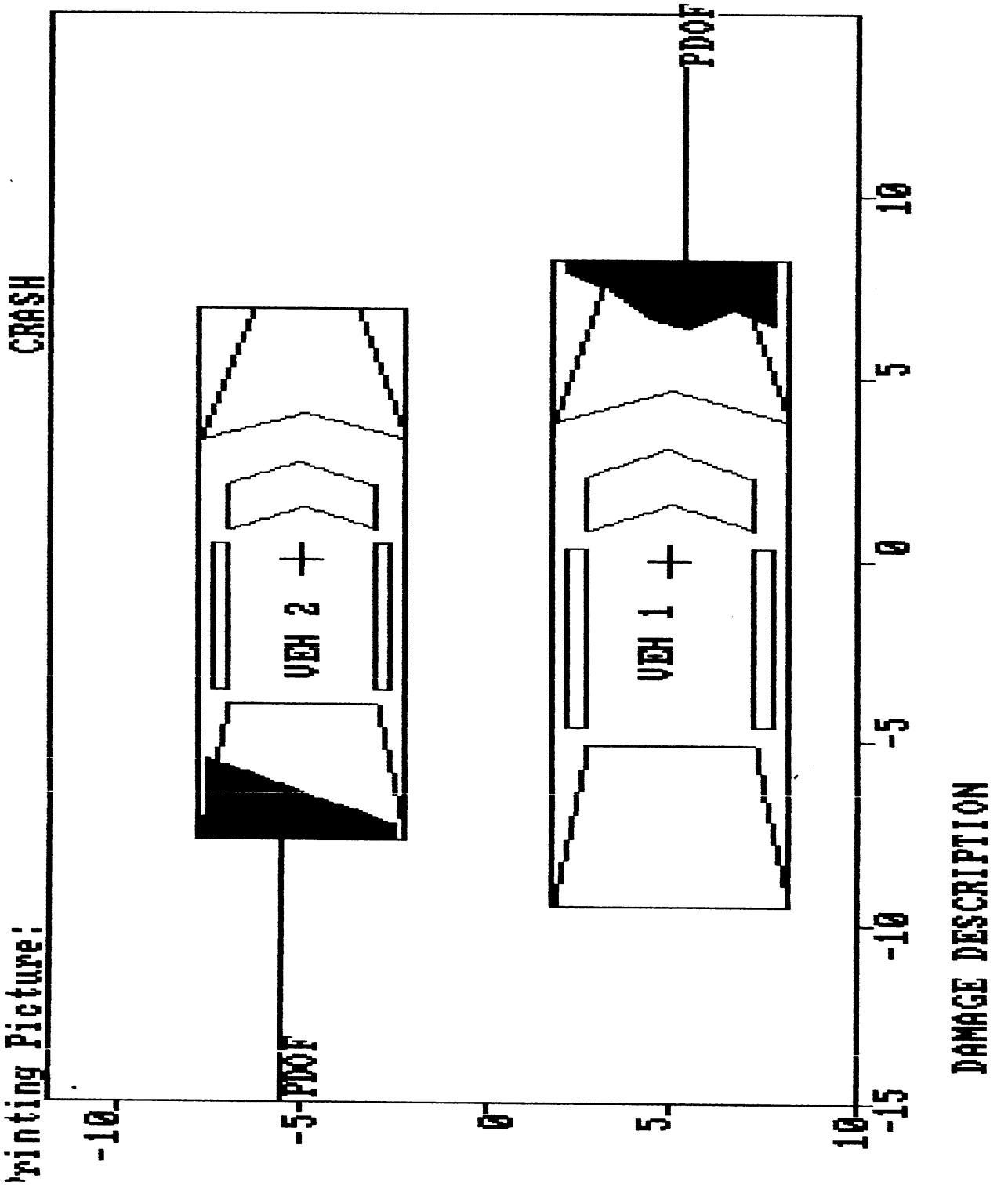
ENERGY DISSIPATED BY DAMAGE VEH#1: 65641.2 FT-LB VEH#2: 69173.2 FT-LB

SUMMARY OF DAMAGE DATA (* INDICATES DEFAUL T VALUE)

VEHICLE # 1			VEHICLE # 2		
TYPE	CATEGORY 4		TYPE	CATEGORY 2	
WEIGHT	3768.0	LBS.	WEIGHT	2602.0	LBS.
CDC	12FDEW2		CDC	06BDEW5	
L	67.0	IN.	L	61.0	IN.
C1	4.0	IN.	C1	25.8	IN.
C2	8.5	IN.	C2	21.7	IN.
C3	18.5	IN.	C3	17.6	IN.
C4	21.5	IN.	C4	13.4	IN.
C5	15.5	IN.	C5	9.7	IN.
C6	21.0	IN.	C6	5.3	IN.
D	.0		D	.0	
RHO	1.00	*	RHO	1.00	*
ANG	.0	DEG.	ANG	180.0	DEG.
D'	5.3	IN.	D'	-6.6	IN.

DIMENSIONS AND INERTIAL PROPERTIES

A1	=	54.7	IN.	A2	=	46.3	IN.
B1	=	59.2	IN.	B2	=	50.1	IN.
TR1	=	61.8	IN.	TR2	=	54.6	IN.
I1	=	36651.3	LB-SEC**2-IN	I2	=	19964.9	LB-SEC**2-IN
M1	=	9.797	LB-SEC**2/IN	M2	=	6.765	LB-SEC**2/IN
XF1	=	98.8	IN.	XF2	=	83.3	IN.
XR1	=	-114.0	IN.	XR2	=	-91.6	IN.
YS1	=	38.5	IN.	YS2	=	33.6	IN.



US Department of Transportation
National Highway Traffic Safety Administration

CRASHPC PROGRAM SUMMARY

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

Identifying Title

45	12 1 F	02	[redacted] 89
Primary Sampling Unit	Case No. – Stratum	Accident Event Sequence No.	Date (mm dd yy)

CRASHPC Vehicle Identification

	Year	Make	Model	NASS Veh. No.
Vehicle 1	1987	FORD	TEMPO	2
Vehicle 2	1985	LINCOLN	MARK 7	3

GENERAL INFORMATION

	VEHICLE 1	VEHICLE 2
Size	2	3
Weight	2462 + 140 + 0 = 2602	3625 + 390 + 0 = 4015
	Curb + Occupant(s) + Cargo =	Curb + Occupant(s) + Cargo =
CDC	12 FDEW1	06 BDEW2
PDOF	000	180
Stiffness	9	3

SCENE INFORMATION

Rest and Impact Positions [ ] No, ***Go To Damage Information*** [ ] Yes

	VEHICLE 1	VEHICLE 2
Rest Position		
X	____.__	____.__
Y	____.__	____.__
PSI	____.__	____.__
Impact Position		
X	____.__	____.__
Y	____.__	____.__
PSI	____.__	____.__
Slip Angle	___	___

VEHICLE MOTION

Sustained Contact [ ] No [ ] Yes

	VEHICLE 1	VEHICLE 2
Skidding	[ ] No [ ] Yes	[ ] No [ ] Yes
Skidding Stop Before Rest	[ ] No [ ] Yes	[ ] No [ ] Yes
End-of-Skidding Position		
X	____.__	____.__
Y	____.__	____.__
PSI	____.__	____.__
Curved Path	[ ] No [ ] Yes	[ ] No [ ] Yes
Point on Path		
X	____.__ Y ____.__	____.__ Y ____.__
Rotation Direction	[ ] None [ ] CW [ ] CCW	[ ] None [ ] CW [ ] CCW
Rotation > 360°	[ ] No [ ] Yes	[ ] No [ ] Yes

FRICTION INFORMATION

Coefficient of Friction . ___

Rolling Resistance Option ___

Vehicle 1 Rolling Resistance

LF ___ . ___ RF ___ . ___

LR ___ . ___ RR ___ . ___

Vehicle 2 Rolling Resistance

LF ___ . ___ RF ___ . ___

LR ___ . ___ RR ___ . ___

TRAJECTORY INFORMATION

Trajectory Data [ ] No [ ] Yes

If No, Go To Damage Information

Vehicle 1 Steer Angles

LF ___ RF ___

LR ___ RR ___

Vehicle 2 Steer Angles

LF ___ RF ___

LR ___ RR ___

Terrain Boundary [ ] No [ ] Yes

First Point

X ___ . ___ Y ___ . ___

Second Point

X ___ . ___ Y ___ . ___

Secondary Friction Coefficient . ___

DAMAGE INFORMATION

	VEHICLE 1	VEHICLE 2
Damage Length	57.0	59.0
Crush Depths C1	1.6	.6
C2	5.7	3.1
C3	5.4	5.2
C4	5.5	5.5
C5	5.8	5.9
C6	3.8	5.7
Damage Offset	± 000.00	± 00.0-

IF THIS COMMON IMPACT WAS WITH A MOTOR VEHICLE *NOT IN TRANSPORT*, FILL IN THE INFORMATION BELOW.

Model Year: _____

Make: _____

Model: _____

VIN: _____

The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.

Complete and ATTACH the appropriate vehicle damage sketch and dimensions to the Form.

SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

CRASH3 RECONSTRUCTION

SPEED CHANGE (DAMAGE)		TOTAL(MPH)	LONG.(MPH)	LAT.(MPH)	ANG.(DEG)
	VEH #1	16.9	-16.9	.0	.0
	VEH #2	11.0	11.0	.0	-180.0

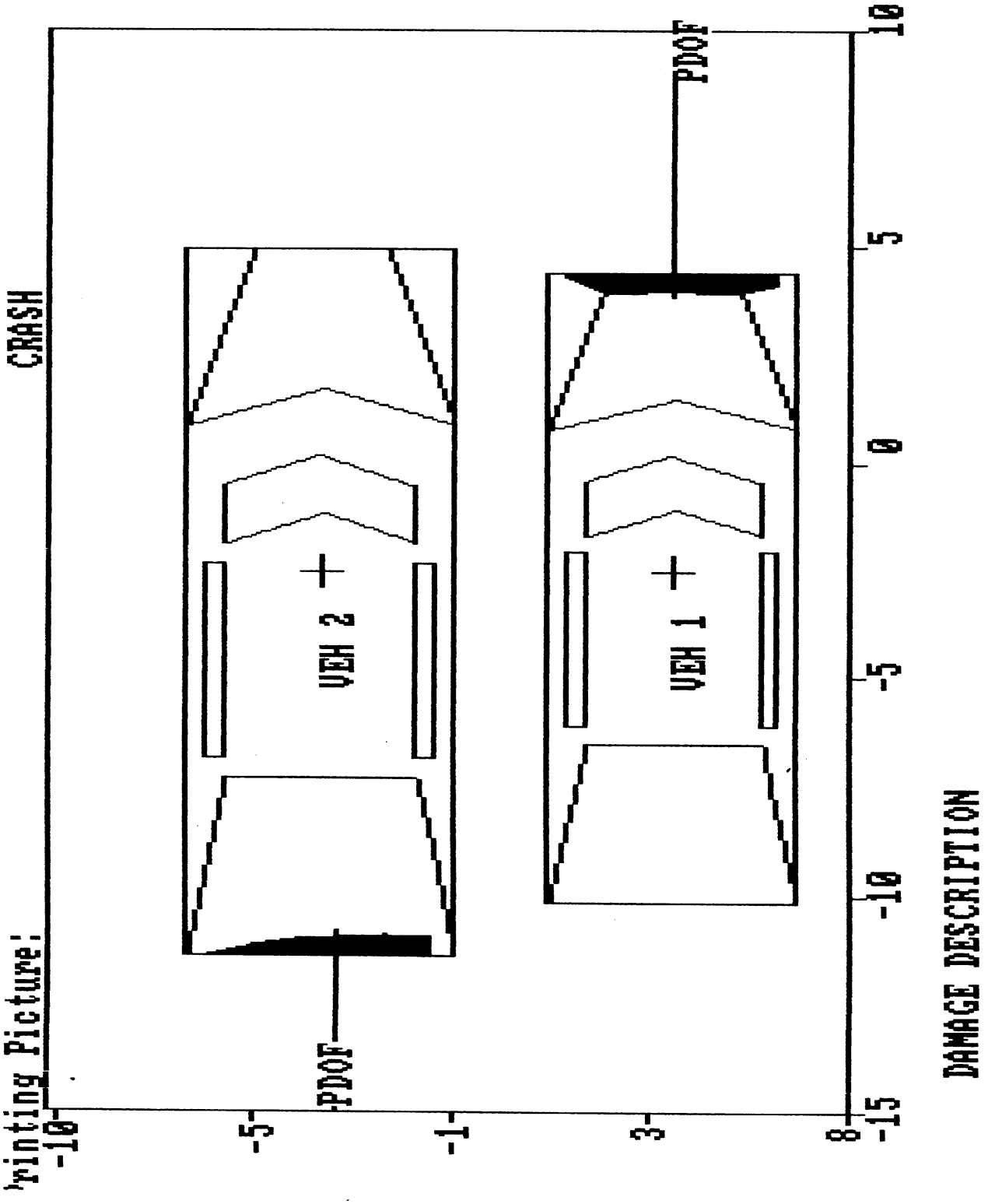
ENERGY DISSIPATED BY DAMAGE VEH#1: 20022.2 FT-LB VEH#2: 21206.0 FT-LB

SUMMARY OF DAMAGE DATA (* INDICATES DEFAUL T VALUE)

VEHICLE # 1			VEHICLE # 2		
TYPE	CATEGORY 2		TYPE	CATEGORY 3	
WEIGHT	2602.0	LBS.	WEIGHT	4015.0	LBS.
CDC	12FDEW1		CDC	06BDEW2	
L	57.0	IN.	L	59.0	IN.
C1	1.6	IN.	C1	.6	IN.
C2	5.7	IN.	C2	3.1	IN.
C3	5.4	IN.	C3	5.2	IN.
C4	5.5	IN.	C4	5.5	IN.
C5	5.8	IN.	C5	5.9	IN.
C6	3.8	IN.	C6	5.7	IN.
D	.0		D	.0	
RHO	1.00	*	RHO	1.00	*
ANG	.0	DEG.	ANG	180.0	DEG.
D'	1.2	IN.	D'	5.1	IN.

DIMENSIONS AND INERTIAL PROPERTIES

A1	=	46.3	IN.	A2	=	51.3	IN.
B1	=	50.1	IN.	B2	=	55.5	IN.
TR1	=	54.6	IN.	TR2	=	58.9	IN.
I1	=	19964.9	LB-SEC**2-IN	I2	=	34700.6	LB-SEC**2-IN
M1	=	6.765	LB-SEC**2/IN	M2	=	10.439	LB-SEC**2/IN
XF1	=	83.3	IN.	XF2	=	89.8	IN.
XR1	=	-91.6	IN.	XR2	=	-106.4	IN.
YS1	=	33.6	IN.	YS2	=	36.3	IN.



GG0181 2 If ALCOHOL/DRUG PRESENCE GV11 equals 0 or 2, then ALCOHOL TEST
GG0182 GV12 should not equal 05-49.

GG0191 2 If ALCOHOL TEST GV12 equals 05-49, then ALCOHOL/DRUG PRESENCE
GG0192 GV11 should equal 1, 3 or 4.

```
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VEH NUM = 01 OCCUPANT NUM = 01
VEH NUM = 01 OCCUPANT NUM = 02

GH0031 2 If BODY TYPE GV07 equals 01-06 and MODEL YEAR GV04 is greater
GH0032 than 67 but not 99 and OCCUPANT POSITION OA10 equals 11 or 13 and
GH0033 PASSIVE AVAILABILITY OA21 does not equal 4, then MANUAL BELT
GH0034 AVAILABILITY OA17 should equal 4, 5, 8 or 9.
VEH NUM = 01 OCCUPANT NUM = 01

GH0031 2 If BODY TYPE GV07 equals 01-06 and MODEL YEAR GV04 is greater
GH0032 than 67 but not 99 and OCCUPANT POSITION OA10 equals 11 or 13 and
GH0033 PASSIVE AVAILABILITY OA21 does not equal 4, then MANUAL BELT
GH0034 AVAILABILITY OA17 should equal 4, 5, 8 or 9.
VEH NUM = 01 OCCUPANT NUM = 02

GT0011 2 If TOTAL DELTA V GV30 is greater than or equal to 30, and less
GT0012 than 99, then at least one A.I.S. SEVERITY OI10(n) should be
GT0013 greater than or equal to 2.
VEH NUM = 02

1989 NATIONAL ACCIDENT SAMPLING SYSTEM

ERROR SUMMARY SCREEN [redacted], 1989

CURRENT VERSION: 2.13

FORM NAME	NUMBER OF DOLLAR SIGNS	NUMBER OF LEVEL 1 ERRORS	NUMBER OF LEVEL 2 ERRORS	VERSION NUMBER CONSISTENT
Accident	0	0	0	Y
General Vehicle	0	0	2	Y
Vehicle Exterior	0	0	0	Y
Vehicle Interior	0	0	0	Y
Occupant Assessment	0	0	0	Y
Occupant Injury	0	0	0	Y
Total Inter Errors		0	3	
Total Case Errors	0	0	5	

U.S. Department of Transportation
National Highway Traffic Safety Administration

SLIDE INDEX

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

Primary Sampling Unit Number 45 Case Number–Stratum 12 1F

Slide No.	Vehicle No.	Direction of Picture	Description of Slide Subject Matter
1-8	123	NO	PATH OF V1 V2 & V3
9-15	123	SO	LOOKING BACK
16-31	1	EXT	DAMAGE TO V1
32-42	1	INT	INTERIOR V1
43-59	2	EXT	DAMAGE TO V2
60-70	2	INT	INTERIOR OF V2
71-81	3	EXT	DAMAGE TO V3
82-92	3	INT	INTERIOR OF V3

HS Form 434B
1/88

Slide No.	Vehicle No.	Direction of Picture	Description of Slide Subject Matter

PSU 45-121F (1989) #1

PSU 45-121F (1989) #2

PSU 45-121F (1989) #3

PSU 45-121F (1989) #4

PSU 45-121F (1989) #5

PSU 45-121F (1989) #6

PSU 45-121F (1989) #7

PSU 45-121F (1989) #8

PSU 45-121F (1989) #9

PSU 45-121F (1989) #10

PSU 45-121F (1989) #11

PSU 45-121F (1989) #12

PSU 45-121F (1989) #13

PSU 45-121F (1989) #14

PSU 45-121F (1989) #15

PSU 45-121F (1989) #16
Best Available

PSU 45-121F (1989) #17

PSU 45-121F (1989) #18
Best Available

PSU 45-121F (1989) #19
Best Available

PSU 45-121F (1989) #20
Best Available

PSU 45-121F (1989) #21
Best Available

PSU 45-121F (1989) #22
Best Available

PSU 45-121F (1989) #23
Best Available

PSU 45-121F (1989) #24
Best Available

PSU 45-121F (1989) #25
Best Available

PSU 45-121F (1989) #26
Best Available

PSU 45-121F (1989) #27
Best Available

PSU 45-121F (1989) #28
Best Available

PSU 45-121F (1989) #29
Best Available

PSU 45-121F (1989) #30
Best Available

PSU 45-121F (1989) #31

PSU 45-121F (1989) #32

PSU 45-121F (1989) #33

PSU 45-121F (1989) #34

PSU 45-121F (1989) #35

PSU 45-121F (1989) #36

PSU 45-121F (1989) #37

PSU 45-121F (1989) #38

PSU 45-121F (1989) #39

PSU 45-121F (1989) #40

PSU 45-121F (1989) #41

PSU 45-121F (1989) #42

PSU 45-121F (1989) #43
Best Available

PSU 45-121F (1989) #44
Best Available

PSU 45-121F (1989) #45
Best Available

PSU 45-121F (1989) #46
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PSU 45-121F (1989) #47
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PSU 45-121F (1989) #48
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PSU 45-121F (1989) #49
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PSU 45-121F (1989) #50
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PSU 45-121F (1989) #51
Best Available

PSU 45-121F (1989) #52
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PSU 45-121F (1989) #53
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PSU 45-121F (1989) #54
Best Available

PSU 45-121F (1989) #55

PSU 45-121F (1989) #56

PSU 45-121F (1989) #57

PSU 45-121F (1989) #58

PSU 45-121F (1989) #59

PSU 45-121F (1989) #60
Best Available

PSU 45-121F (1989) #61
Best Available

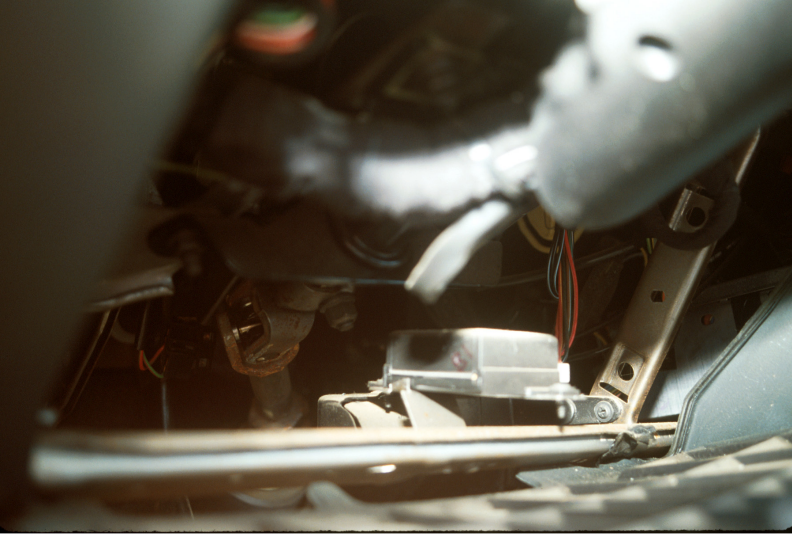
PSU 45-121F (1989) #62
Best Available

PSU 45-121F (1989) #63
Best Available

PSU 45-121F (1989) #64

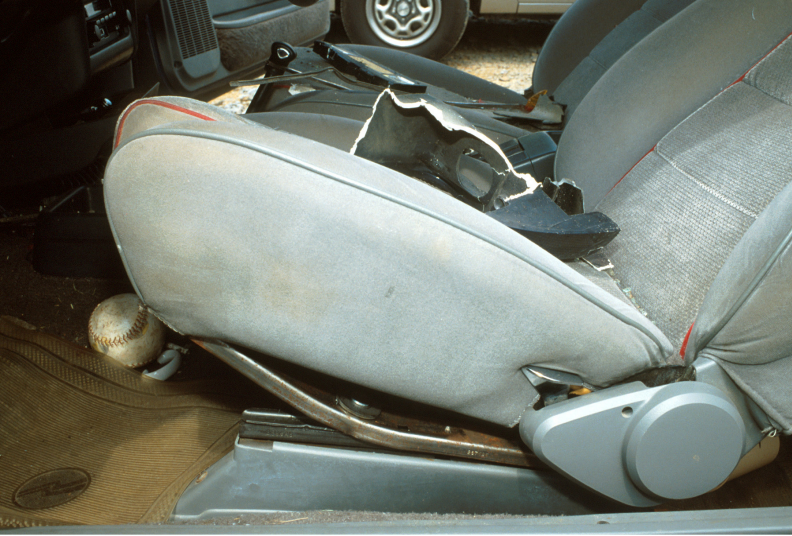
PSU 45-121F (1989) #65

PSU 45-121F (1989) #66



PSU 45-121F (1989) #67

PSU 45-121F (1989) #68



PSU 45-121F (1989) #69

PSU 45-121F (1989) #70

PSU 45-121F (1989) #71
Best Available

PSU 45-121F (1989) #72
Best Available

PSU 45-121F (1989) #73
Best Available

PSU 45-121F (1989) #74
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PSU 45-121F (1989) #75
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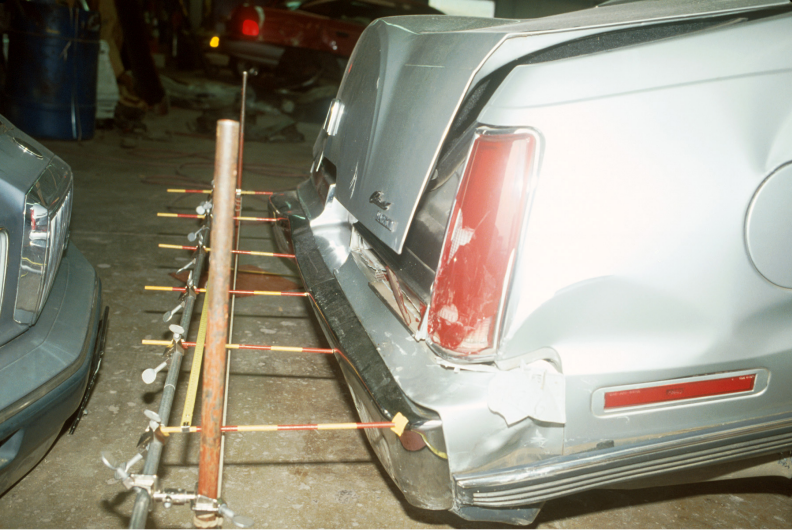
PSU 45-121F (1989) #76
Best Available

PSU 45-121F (1989) #77
Best Available



PSU 45-121F (1989) #78
Best Available

PSU 45-121F (1989) #79
Best Available

PSU 45-121F (1989) #80
Best Available

PSU 45-121F (1989) #81
Best Available

PSU 45-121F (1989) #82

PSU 45-121F (1989) #83

PSU 45-121F (1989) #84

PSU 45-121F (1989) #85

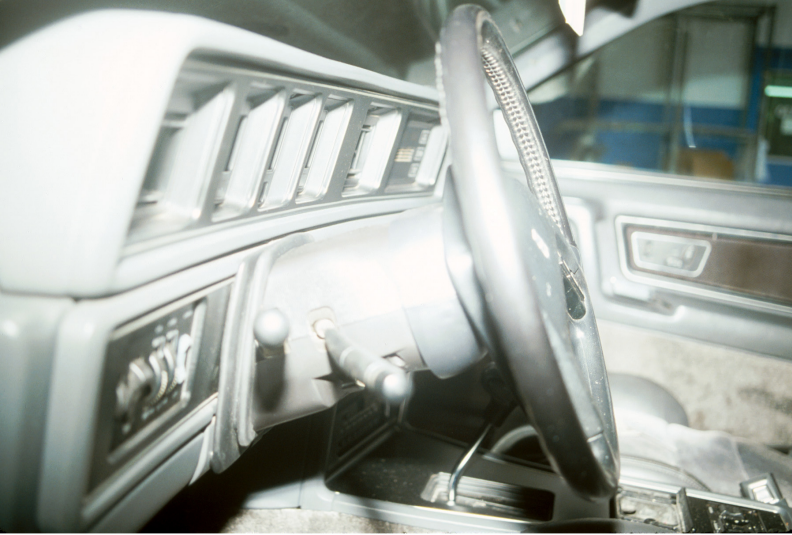
PSU 45-121F (1989) #86

PSU 45-121F (1989) #87

PSU 45-121F (1989) #88

PSU 45-121F (1989) #89

PSU 45-121F (1989) #90



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PSU 45-121F (1989) #92